AE 2.106/3: 14/pt.140-199/986

code of federal regulations

Aeronautics and Space

ORIGINAL

14 335

PARTS 140 TO 199
Revised as of January 1 1986

[illegible]

BEST COPY AVAILABLE

code of federal regulations

Aeronautics and Space

14

PARTS 140 TO 199

Revised as of January 1, 1986

CONTAINING
A CODIFICATION OF DOCUMENTS
OF GENERAL APPLICABILITY
AND FUTURE EFFECT

AS OF JANUARY 1, 1986

With Ancillaries

Published by
the Office of the Federal Register
National Archives and Records
Administration

as a Special Edition of
the Federal Register

1934

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON: [redacted] 1986

FOR SALE BY THE SUPERINTENDENT OF DOCUMENTS
U.S. GOVERNMENT PRINTING OFFICE

MICROFICHE (24X)

SUBSCRIPTION PRICE: DOMESTIC-- $225.00 A YEAR
$ 2.25 SINGLE COPY
FOREIGN-- $280.00 A YEAR
$ 2.85 SINGLE COPY

II

Table of Contents

Page

Explanation v

Title 14:

Chapter I—Federal Aviation Administration, Department of Transportation (Continued) (Parts 140 to 199) 3

Finding Aids:

Material Approved for Incorporation by Reference 291

Table of CFR Titles and Chapters 297

Alphabetical List of Agencies Appearing in the CFR 311

List of CFR Sections Affected 319

Cite this Code **CFR**

thus: **14 CFR 141.1**

Explanation

The Code of Federal Regulations is a codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government. The Code is divided into 50 titles which represent broad areas subject to Federal regulation. Each title is divided into chapters which usually bear the name of the issuing agency. Each chapter is further subdivided into parts covering specific regulatory areas.

ISSUE DATES

Each volume of the Code is revised at least once each calendar year and issued on a quarterly basis approximately as follows:

Title 1 through Title 16	as of January 1
Title 17 through Title 27	as of April 1
Title 28 through Title 41	as of July 1
Title 42 through Title 50	as of October 1

The appropriate revision date is printed on the cover of each volume.

LEGAL STATUS

The contents of the Federal Register are required to be judicially noticed (44 U.S.C. 1507). The Code of Federal Regulations is prima facie evidence of the text of the original documents (44 U.S.C. 1510).

HOW TO USE THE CODE OF FEDERAL REGULATIONS

The Code of Federal Regulations is kept up to date by the individual issues of the Federal Register. These two publications must be used together to determine the latest version of any given rule.

To determine whether a Code volume has been amended since its revision date (in this case, January 1, 1986), consult the "List of CFR Sections Affected (LSA)," which is issued monthly, and the "Cumulative List of Parts Affected," which appears in the Reader Aids section of the daily Federal Register. These two lists will identify the Federal Register page number of the latest amendment of any given rule.

EFFECTIVE AND EXPIRATION DATES

Each volume of the Code contains amendments published in the Federal Register since the last revision of that volume of the Code. Source citations for the regulations are referred to by volume number and page number of the Federal Register and date of publication. Publication dates and effective dates are usually not the same and care must be exercised by the user in determining the actual effective date. In instances where the effective date is beyond the cut-off date for the Code a note has been inserted to reflect the future effective date. In those instances where a regulation published in the Federal Register states a date certain for expiration, an appropriate note will be inserted following the text.

OMB CONTROL NUMBERS

The Paperwork Reduction Act of 1980 (Pub. L. 96-511) requires Federal agencies to display an OMB control number with their information collection request. Many agencies have begun publishing numerous OMB control numbers as amendments to existing regulations in the CFR. These OMB numbers are placed as close as possible to the applicable recordkeeping or reporting requirements.

OBSOLETE PROVISIONS

Provisions that become obsolete before the revision date stated on the cover of each volume are not carried. Code users may find the text of provisions in effect on a given date in the past by using the appropriate numerical list of sections affected. For the period before January 1, 1973, consult either the List of CFR Sections Affected, 1949-1963, or 1964-1972, published in three separate volumes. For the period beginning January 1, 1973, a "List of CFR Sections Affected" is published at the end of each CFR volume.

INCORPORATION BY REFERENCE

What is incorporation by reference? Incorporation by reference was established by statute and allows Federal agencies to meet the requirement to publish regulations in the Federal Register by referring to materials already published elsewhere. For an incorporation to be valid, the Director of the Federal Register must approve it. The legal effect of incorporation by reference is that the material is treated as if it were published in full in the Federal Register (5 U.S.C. 552(a)). This material, like any other properly issued regulation, has the force of law.

What is a proper incorporation by reference? The Director of the Federal Register will approve an incorporation by reference only when the requirements of 1 CFR Part 51 are met. Some of the elements on which approval is based are:

(a) The incorporation will substantially reduce the volume of material published in the Federal Register.

(b) The matter incorporated is in fact available to the extent necessary to afford fairness and uniformity in the administrative process.

(c) The incorporating document is drafted and submitted for publication in accordance with 1 CFR Part 51.

Properly approved incorporations by reference in this volume are listed in the Finding Aids at the end of this volume.

What if the material incorporated by reference cannot be found? If you have any problem locating or obtaining a copy of material listed in the Finding Aids of this volume as an approved incorporation by reference, please contact the agency that issued the regulation containing that incorporation. If, after contacting the agency, you find the material is not available, please notify the Director of the Federal Register, National Archives and Records Administration, Washington DC 20408, or call (202) 523-4534.

CFR INDEXES AND TABULAR GUIDES

A subject index to the Code of Federal Regulations is contained in a separate volume, revised annually as of January 1, entitled **CFR Index and Finding Aids**. This volume contains the Parallel Table of Statutory Authorities and Agency Rules (Table I), and Acts Requiring Publication in the Federal Register (Table

III). A list of CFR Titles, Chapters, and Parts and an alphabetical list of agencies publishing in the CFR are also included in this volume.

An index to the text of "Title 3—The President" is carried within that volume.

The Federal Register Index is issued monthly in cumulative form. This index is based on a consolidation of the "Contents" entries in the daily Federal Register.

A List of CFR Sections Affected (LSA) is published monthly, keyed to the revision dates of the 50 CFR titles.

REPUBLICATION OF MATERIAL

There are no restrictions on the republication of material appearing in the Code of Federal Regulations.

INQUIRIES AND SALES

For a summary, legal interpretation, or other explanation of any regulation in this volume, contact the issuing agency. Inquiries concerning editing procedures and reference assistance with respect to the Code of Federal Regulations may be addressed to the Director, Office of the Federal Register, National Archives and Records Administration, Washington, D.C. 20408 (telephone 202-523-3517). Sales are handled exclusively by the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 (telephone 202-783-3238).

John E. Byrne,
Director,
Office of the Federal Register.

January 1, 1986

BLANK PAGE

THIS TITLE

Title 14—AERONAUTICS AND SPACE is composed of five volumes. The first three volumes contain Chapter I—Federal Aviation Administration (Parts 1-59, 60-139 and 140-199). The fourth volume contains Chapter II—Office of the Secretary, Department of Transportation (Aviation Proceedings) (Parts 200-1199) and the fifth volume contains Chapter V—National Aeronautics and Space Administration (Part 1200-End). The fourth volume (Parts 200-1199) includes a redesignation table and a table showing the disposition of the Civil Aeronautics Board's regulations, effective January 1, 1985, upon the expiration of that agency. The contents of these volumes represent all current regulations codified under this title of the CFR as of January 1, 1986.

For this volume, Mildred Lee Isler as Chief Editor. The Code of Federal Regulations publication program is under the direction of Martha B. Girard, assisted by Robert E. Jordan.

Would you like to know...

if any changes have been made to the Code of Federal Regulations or what documents have been published in the Federal Register without reading the Federal Register every day? If so, you may wish to subscribe to the *LSA (List of CFR Sections Affected)*, the *Federal Register Index*, or both.

LSA · List of CFR Sections Affected

The LSA (List of CFR Sections Affected) is designed to lead users of the Code of Federal Regulations to amendatory actions published in the Federal Register. The LSA is issued monthly in cumulative form. Entries indicate the nature of the changes—such as revised, removed, or corrected.

$24.00 per year

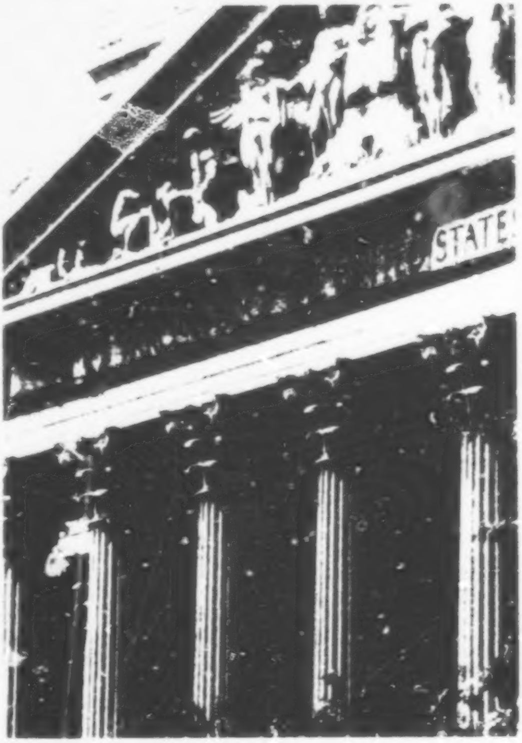
Federal Register Index

The Index, covering the contents of the daily Federal Register, is issued monthly in cumulative form. Entries are carried primarily under the names of the issuing agencies. Significant subjects are carried as cross-references.

$22.00 per year

A finding aid is included in each publication which lists Federal Register page numbers with the date of publication in the Federal Register.

Note to FR Subscribers:
FR Indexes and the LSA (List of CFR Sections Affected) are mailed automatically to regular FR subscribers.



Order Form

Mail To: Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402

Enclosed is $ ________ ☐ check,
☐ money order, or charge to my
Deposit Account No.
☐☐☐☐☐☐☐ - ☐
Order No. ______________

Master Card and VISA accepted.

MasterCard

VISA

Credit Card Orders Only
Total charges $ ________
Fill in the boxes below.

Customer's Telephone No.
(   )
Area Code

Credit Card No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Expiration Date Month / Year ☐☐☐☐

Charge orders may be telephoned to the GPO order desk at (202)783-3238 from 8:00 a.m. to 4:00 p.m. eastern time, Monday-Friday (except holidays)

Please enter the subscription(s) I have indicated.

___ **LSA**
List of CFR Sections Affected
$24.00 a year domestic
$30.00 foreign

___ **Federal Register Index**
$22.00 a year domestic
$27.50 foreign

PLEASE PRINT OR TYPE

Name - First, Last

Company name or additional address line

Street address

City

State

ZIP Code

(or Country)

1085

Title 14—Aeronautics and Space

(This book contains Parts 140 to 199)

Part

CHAPTER I—Federal Aviation Administration, Department of Transportation (Continued) 141

BLANK PAGE

CHAPTER I—FEDERAL AVIATION ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

(Continued)

(Parts 140 to 199)

SUBCHAPTER H—SCHOOLS AND OTHER CERTIFICATED AGENCIES

Part *Page*
141 Pilot schools 5
143 Ground instructors 24
145 Repair stations 26
147 Aviation maintenance technician schools 44
149 Parachute lofts 52

SUBCHAPTER I—AIRPORTS

150 Airport noise compatibility planning 55
151 Federal aid to airports 69
152 Airport aid program 107
153 Acquisition of U.S. land for public airports 144
154 Acquisition of U.S. land for public airports under the Airport and Airway Development Act of 1970 148
155 Release of airport property from surplus property disposal restrictions 152
157 Notice of construction, alteration, activation, and deactivation of airports 155
159 National Capital airports 157

Part *Page*

169 Expenditure of Federal funds for nonmilitary airports or air navigation facilities thereon 175

SUBCHAPTER J—NAVIGATIONAL FACILITIES

171 Non-Federal navigation facilities 178

SUBCHAPTER K—ADMINISTRATIVE REGULATIONS

183 Representatives of the Administrator 251

185 Testimony by employees and production of records in legal proceedings, and service of legal process and pleadings 255

187 Fees 256

189 Use of Federal Aviation Administration communications system 257

191 Withholding security information from disclosure under the Air Transportation Security Act of 1974 259

SUBHCAPTERS L—M [RESERVED]

SUBCHAPTER N—WAR RISK INSURANCE

198 Aviation insurance (effective January 15, 1986) 261

198 War risk insurance (effective until January 15, 1986) 264

SUBCHAPTER O—AIRCRAFT LOAN GUARANTEE PROGRAM

199 Aircraft loan guarantee program 285

SUBCHAPTER H--SCHOOLS AND OTHER CERTIFICATED AGENCIES

PART 141--PILOT SCHOOLS

Subpart A—General

Sec.
141.1 Applicability.
141.3 Certificate required.
141.5 Pilot school certificate.
141.7 Provisional pilot school certificate.
141.9 Examining authority.
141.11 Pilot school ratings.
141.13 Application for issuance, amendment, or renewal.
141.15 Location of facilities.
141.17 Duration of certificates.
141.18 Carriage of narcotic drugs, marihuana, and depressant or stimulant drugs or substances.
141.19 Display of certificate.
141.21 Inspections.
141.23 Advertising limitations.
141.25 Business office and operations base.
141.27 Renewal of certificates and ratings.
141.29 Existing pilot school certificates; validity.

Subpart B—Personnel, Aircraft, and Facilities Requirements

141.31 Applicability.
141.33 Personnel.
141.35 Chief instructor qualifications.
141.37 Airports.
141.39 Aircraft.
141.41 Ground trainers and training aids.
141.43 Pilot briefing areas.
141.45 Ground training facilities.

Subpart C—Training Course Outline and Curriculum

141.51 Applicability.
141.53 Training course outline: General.
141.55 Training course outline: Contents.
141.57 Special curricula.

Subpart D—Examining Authority

141.61 Applicability.
141.63 Application and qualification.
141.65 Privileges.
141.67 Limitations and reports.

Subpart E—Operating Rules

141.71 Applicability.
141.73 Privileges.
141.75 Aircraft requirements.
141.77 Limitations.
141.79 Flight instruction.
141.81 Ground training.
141.83 Quality of instruction.
Sec.
141.85 Chief instructor responsibilities.
141.87 Change of chief instructor.
141.89 Maintenance of personnel, facilities, and equipment.
141.91 Satellite bases.
141.93 Enrollment.
141.95 Graduation certificate.

Subpart F—Records

141.101 Training records.

APPENDIX A—PRIVATE PILOT CERTIFICATION COURSE (AIRPLANES)
APPENDIX B—PRIVATE TEST COURSE (AIRPLANES)
APPENDIX C—INSTRUMENT RATING COURSE (AIRPLANES)
APPENDIX D—COMMERCIAL PILOT CERTIFICATION COURSE (AIRPLANES)
APPENDIX E—COMMERCIAL TEST COURSE (AIRPLANES)
APPENDIX F—ROTORCRAFT, GLIDERS, LIGHTER-THAN-AIR AIRCRAFT AND AIRCRAFT RATING COURSES
APPENDIX G—PILOT GROUND SCHOOL COURSE
APPENDIX H—TEST PREPARATION COURSES

AUTHORITY: Secs. 313(a), 314, 601, 602, and 607 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1355, 1421, 1422, and 1427), and sec. 6(c) of the Dept. of Transportation Act (49 U.S.C. 1655(c)).

SOURCE: Docket No. 12547, 39 FR 20152, June 6, 1974, unless otherwise noted.

Subpart A—General

§ 141.1 Applicability.

This part prescribes the requirements for issuing pilot school certificates, provisional pilot school certificates, and associated ratings and the general operating rules for the holders of those certificates and ratings.

§ 141.3 Certificate required.

No person may operate as a certificated pilot school without, or in violation of, a pilot school certificate or provisional pilot school certificate issued under this part.

§ 141.5 Pilot school certificate.

An applicant is issued a pilot school certificate with associated ratings for that certificate if—

(a) It meets the pertinent requirements of Subparts A through C of this part; and

(b) Within the 24 months before the date of application, it has trained and recommended for pilot certification and rating tests, at least 10 applicants for pilot certificates and ratings and at least 8 of the 10 most recent graduates tested by an FAA inspector or designated pilot examiner, passed that test the first time.

§ 141.7 Provisional pilot school certificate.

An applicant is issued a provisional pilot school certificate with associated ratings if it meets the pertinent requirements of Subparts A through C of this part, but does not meet the recent training activity requirement specified in § 141.5(b).

§ 141.9 Examining authority.

An applicant is issued an examining authority for its pilot school certificate if it meets the requirements of Subpart D of this part.

§ 141.11 Pilot school ratings.

Associated ratings are issued with a pilot school certificate or a provisional pilot school certificate, specifying each of the following courses that the school is authorized to conduct:

(a) *Certification courses.*

(1) Private pilot.

(2) Private test course.

(3) Instrument rating.

(4) Commercial pilot.

(5) Commercial test course.

(6) Additional aircraft rating.

(b) *Pilot ground school course.*

(1) Pilot ground school.

(c) *Test preparation courses.*

(1) Flight instructor certification.

(2) Additional flight instructor rating.

(3) Additional instrument rating.

(4) Airline transport pilot certification.

(5) Pilot refresher course.

(6) Agricultural aircraft operations course.

(7) Rotorcraft external load operations course.

[Doc. No. 12547, 39 FR 20152, June 6, 1974; 39 FR 25473, July 11, 1974]

§ 141.13 Application for issuance, amendment, or renewal.

(a) Application for an original certificate and rating, for an additional rating, or for the renewal of a certificate under this part is made on a form and in a manner prescribed by the Administrator.

(b) An application for the issuance or amendment of a certificate or rating must be accompanied by three copies of the proposed training course outline for each course for which approval is sought.

§ 141.15 Location of facilities.

Neither a pilot school certificate nor a provisional pilot school certificate is issued for a school having a base or other facilities located outside the United States unless the Administrator finds that the location of the base or facilities at that place is needed for the training of students who are citizens of the United States.

§ 141.17 Duration of certificates.

(a) Unless sooner surrendered, suspended, or revoked, a pilot school certificate or a provisional pilot school certificate expires—

(1) At the end of the twenty-fourth month after the month in which it was issued or renewed; or

(2) Except as provided in paragraph (b) of this section, on the date that any change in ownership of the school or the facilities upon which its certification is based occurs; or

(3) Upon notice by the Administrator that the school has failed for more than 60 days to maintain the facilities, aircraft, and personnel required for at least one of its approved courses.

(b) A change in the ownership of a certificated pilot school or provisional pilot school does not terminate that certificate if within 30 days after the date that any change in ownership of the school occurs, application is made for an appropriate amendment to the certificate and no change in the facilities, instructor, personnel or training course is involved.

(c) An examining authority issued to the holder of a pilot school certificate expires on the date that the pilot school certificate expires, or is surrendered, suspended, or revoked.

§ 141.18 Carriage of narcotic drugs, marihuana, and depressant or stimulant drugs or substances.

If the holder of a certificate issued under this part permits any aircraft owned or leased by that holder to be engaged in any operation that the certificate holder knows to be in violation of § 91.12(a) of this chapter, that operation is a basis for suspending or revoking the certificate.

§ 141.19 Display of certificate.

(a) Each holder of a pilot school certificate or a provisional pilot school certificate shall display that certificate at a place in the school that is normally accessible to the public and is not obscured.

(b) A certificate shall be made available for inspection upon request by the Administrator, or an authorized representative of the National Transportation Safety Board, or of any Federal, State, or local law enforcement officer.

§ 141.21 Inspections.

Each holder of a certificate issued under this part shall allow the Administrator to inspect its personnel, facilities, equipment, and records to determine its compliance with the Federal Aviation Act of 1958, and the Federal Aviation Regulations, and its eligibility to hold its certificate.

§ 141.23 Advertising limitations.

(a) The holder of a pilot school certificate or a provisional pilot school certificate may not make any statement relating to its certification and ratings which is false or designed to mislead any person contemplating enrollment in that school.

(b) The holder of a pilot school certificate or a provisional pilot school certificate may not advertise that the school is certificated unless it clearly differentiates between courses that have been approved and those that have not.

(c) The holder of a pilot school certificate or a provisional pilot school certificate—

(1) That has relocated its school shall promptly remove from the premises it has vacated all signs indicating that the school was certificated by the Administrator; or

(2) Whose certificate has expired, or has been surrendered, suspended, or revoked shall promptly remove all indications (including signs), wherever located, that the school is certificated by the Administrator.

§ 141.25 Business office and operations base.

(a) Each holder of a pilot school or a provisional pilot school certificate shall maintain a principal business office with a mailing address in the name shown on its certificate. The business office shall have facilities and equipment that are adequate to maintain the required school files and records and to operate the business of the school. The office may not be shared with, or used by, another pilot school.

(b) Each certificate holder shall, before changing the location of its business office or base of operations, notify the FAA District Office having jurisdiction over the area of the new location. The notice shall be submitted in writing at least 30 days before the change. For a change in the holder's base of operations, the notice shall be accompanied by any amendments needed for the holder's approved training course outline.

(c) No certificate holder may conduct training at an operations base other than the one specified in its certificate, until—

(1) The base has been inspected and approved by the FAA District Office having jurisdiction over the school for use by the certificate holder; and

(2) The course of training and any needed amendments thereto have been approved for training at that base.

§ 141.27 Renewal of certificates and ratings.

(a) *Pilot school certificates.* The holder of a pilot school certificate may apply for a renewal of the certificate not less than 30 days before the certificate expires. If the school meets the requirements of this part for the issuance of the certificate, its certificate is renewed for 24 months.

(b) *Pilot school ratings.* Each pilot school rating on a pilot school certificate may be renewed with that certificate for another 24 months if the Administrator finds that the school meets the requirements prescribed in this part for the issuance of the rating.

(c) *Provisional pilot school certificates.* (1) A provisional pilot school certificate and any ratings on that certificate may not be renewed. However, the holder of that certificate may apply for a pilot school certificate with appropriate ratings not less than 30 days before the provisional certificate expires. The school is issued a pilot school certificate with appropriate ratings, if it meets the appropriate requirements of this part.

(2) The holder of a provisional pilot school certificate may not reapply for a provisional pilot school certificate for at least 180 days after the date of its expiration.

§ 141.29 Existing pilot school certificates: validity.

(a) A pilot school certificate issued before November 1, 1974 remains in effect until the expiration date on that certificate, unless it is sooner surrendered, suspended, or revoked.

(b) A pilot school certificate issued before November 1, 1974, may be renewed under the requirements of Part 141 in effect before November 1, 1974, to allow those students enrolled in a school's approved course of training prior to November 1, 1974, to complete that training. The renewal is issued for a period long enough for the students to complete their training in the enrolled course, but not for more than 24 months after November 1, 1974.

Subpart B—Personnel, Aircraft, and Facilities Requirements

§ 141.31 Applicability.

This subpart prescribes the personnel and aircraft requirements for a pilot school or a provisional pilot school certificate. It also prescribes the facilities an applicant must have available to him on a continuous use basis to hold a pilot school or provisional pilot school certificate. As used in this subpart, a person has the continuous use of a facility, including an airport, if it has the use of the facility when needed as the owner, or under a written agreement giving it that use for at least 6 calendar months from the date of the application for the initial certificate or a renewal of that certificate.

§ 141.33 Personnel.

(a) An applicant for a pilot school or provisional pilot school certificate must show that—

(1) It has adequate personnel and authorized instructors, including a chief instructor for each course of training, who are qualified and competent to perform the duties to which they are assigned;

(2) Each dispatcher, aircraft handler, line crewman, and serviceman to be used has been instructed in the procedures and responsibilities of his employment. (Qualified operations personnel may serve in more than one capacity with a pilot school or provisional pilot school); and

(3) Each instructor to be used for ground or flight instruction holds a flight or ground instructor certificate, as appropriate, with ratings for the course of instruction and any aircraft used in that course.

(b) An applicant for a pilot school or a provisional pilot school certificate shall designate a chief instructor for each course of training who meets the requirements of a § 141.35 of this part. Where necessary, the applicant shall also designate at least one instructor to assist the chief instructor and serve for the chief instructor in his absence. A chief instructor or his assistant may be designated to serve in that capacity for more than one approved course but not for more than one school.

§ 141.35 Chief instructor qualifications.

(a) To be eligible for a designation as a chief flight instructor or an assistant chief flight instructor for a course of training, a person must meet the following requirements:

(1) He must pass—

(i) An oral test on this part and on Parts 61 and 91 of this chapter and on the training standards and objectives of the course for which he is designated; and

(ii) A flight test on the flight procedures and maneuvers appropriate to that course.

(2) He must meet the applicable requirements of paragraphs (b), (c), and (d) of this section. However, a chief flight instructor or an assistant chief flight instructor for a course of training for gliders, free balloons or airships is only required to have 40 percent of the hours required in paragraphs (b) and (c) of this section.

(b) For a course of training leading to the issuance of a private pilot certificate or rating, a chief flight instructor or an assistant chief flight instructor must have—

(1) At least a commercial pilot certificate and a flight instructor certificate, each with a rating for the category and class of aircraft used in the course;

(2) At least 1,000 hours as pilot in command;

(3) Primary flight instruction experience, acquired as either a certificated flight instructor or an instructor in a military pilot primary flight training program, or a combination thereof, consisting of at least—

(i) Two years and a total of 500 flight hours; or

(ii) 1,000 flight hours; and

(4) Within the year preceding designation, at least 100 hours of flight instruction as a certificated flight instructor in the category of aircraft used in the course.

(c) For a course of training leading to the issuance of an instrument rating or a rating with instrument privileges, a chief flight instructor or an assistant chief flight instructor must have—

(1) At least a commercial pilot certificate and a flight instructor certificate, each with an appropriate instrument rating;

(2) At least 100 hours of flight time under actual or simulated instrument conditions;

(3) At least 1,000 hours as pilot in command;

(4) Instrument flight instructor experience, acquired as either a certificated instrument flight instructor or an instructor in a military pilot basic or instrument flight training program, or a combination thereof; consisting of at least—

(i) Two years and a total of 250 flight hours; or

(ii) 400 flight hours; and

(5) Within the year preceding designation, at least—

(i) 100 hours of instrument flight instruction as a certificated instrument flight instructor; or

(ii) One year of active service as an FAA designated instrument rating examiner.

(d) For a course of training other than those that lead to the issuance of a private pilot certificate or rating, or an instrument rating or a rating with instrument privileges, a chief flight instructor or an assistant chief flight instructor must have—

(1) At least a commercial pilot certificate and a flight instructor certificate, each with a rating for the category and class of aircraft used in the course of training and, for a course of training using airplanes or airships, an instrument rating on his commercial pilot certificate;

(2) At least 2,000 hours as pilot in command;

(3) Flight instruction experience, acquired as either a certificated flight instructor or an instructor in a military pilot primary or basic flight training program or a combination thereof, consisting of at least—

(i) Three years and a total of 1,000 flight hours; or

(ii) 1,500 flight hours; and

(4) Within the year preceding designation, at least—

(i) 100 hours of pilot instruction as a certificated flight instructor in the category of aircraft use in the course;

(ii) One year of active service as chief flight instructor of an approved course of training; or

(iii) One year of active service as an FAA designated pilot examiner.

(e) To be eligible for designation as a chief instructor or an assistant chief instructor for a ground school course, a person must have one year of experience as a ground school instructor in a certificated pilot school.

§ 141.37 Airports.

(a) An applicant for a pilot school certificate or a provisional pilot school certificate must show that it has continuous use of each airport at which training flights originate.

(b) Each airport used for airplanes and gliders must have at least one runway or takeoff area that allows training aircraft to make a normal takeoff or landing at full gross weight—

(1) Under calm wind (not more than five miles per hour) conditions and temperatures equal to the mean high temperature for the hottest month of the year in the operating area;

(2) Clearing all obstacles in the takeoff flight path by at least 50 feet;

(3) With the powerplant operation and landing gear and flap operation, if applicable recommended by the manufacturer; and

(4) With smooth transition from lift-off to the best rate of climb speed without exceptional piloting skills or techniques.

(c) Each airport must have a wind direction indicator that is visible from the ends of each runway at ground level.

(d) Each airport must have a traffic direction indicator when the airport has not operating control tower and UNICOM advisories are not available.

(e) Each airport used for night training flights must have permanent runway lights.

§ 141.39 Aircraft.

An applicant for a pilot school or provisional pilot school certificate must show that each aircraft used by that school for flight instruction and solo flights meets the following requirements:

(a) It must be registered as a civil aircraft of the United States.

(b) Except for aircraft used for flight instruction and solo flights in a course of training for agricultural aircraft operations, external load operations and similar aerial work operations, it must be certificated in the standard airworthiness category.

(c) It must be maintained and inspected in accordance with the requirements of Part 91 of this chapter that apply to aircraft used to give flight instruction for hire.

(d) For use in flight instruction, it must be at least a two place aircraft having engine power controls and flight controls that are easily reached and that operate in a normal manner from both pilot stations.

(e) For use in IFR en route operations and instrument approaches, it must be equipped and maintained for IFR operations. However, for instruction in the control and precision maneuvering of an aircraft by reference to instruments, the aircraft may be equipped as provided in the approved course of training.

§ 141.41 Ground trainers and training aids.

An applicant for a pilot school or a provisional pilot school certificate must show that its ground trainers, and training aids and equipment meet the following requirements:

(a) *Pilot ground trainers.* (1) Each pilot ground trainer used to obtain the maximum flight training credit allowed for ground trainers in an approved pilot training course curriculum must have—

(i) An enclosed pilot's station or cockpit which accommodates one or more flight crewmembers;

(ii) Controls to simulate the rotation of the trainer about three axes;

(iii) The minimum instrumentation and equipment required for powered aircraft in § 91.33 of this chapter, for the type of flight operations simulated;

(iv) For VFR instruction, a means for simulating visual flight conditions, including motion of the trainer, or projections, or models operated by the flight controls; and

(v) For IFR instruction, a means for recording the flight path simulated by the trainer.

(2) Pilot ground trainers other than those covered under paragraph (a)(1) of this section must have—

(i) An enclosed pilot's station or cockpit, which accommodates one or more flight crewmembers;

(ii) Controls to simulate the rotation of the trainer about three axes; and

(iii) The minimum instrumentation and equipment required for powered aircraft in § 91.33 of this chapter, for the type of flight operations simulated.

(b) *Training aids and equipment.* Each training aid, including any audiovisuals, mockup, chart, or aircraft component listed in the approved training course outline must be accurate and appropriate to the course for which it is used.

§ 141.43 Pilot briefing areas.

(a) An applicant for a pilot school or provisional pilot school certificate must show that it has the continuous use of a briefing area located at each airport at which training flights originate, that is—

(1) Adequate to shelter students waiting to engage in their training flights;

(2) Arranged and equipped for the conduct of pilot briefings; and

(3) For a school with an instrument or commercial pilot course rating, equipped with private landline or telephone communication to the nearest FAA Flight Service Station, except that this communication equipment is not required if the briefing area and the flight service station are located on the same airport and are readily accessible to each other.

(b) A briefing area required by paragraph (a) of this section may not be used by the applicant if it is available for use by any other pilot school during the period it is required for use by the applicant.

§ 141.45 Ground training facilities.

An applicant for a pilot school or provisional pilot school certificate must show that each room, training booth, or other space used for instructional purposes is heated, lighted, and ventilated to conform to local building, sanitation, and health codes. In addition, the training facility must be so located that the students in that facility are not distracted by the instruction conducted in other rooms, or by flight and maintenance operations on the airport.

Subpart C—Training Course Outline and Curriculum

§ 141.51 Applicability.

This subpart prescribes the curriculum and course outline requirements for the issuance of a pilot school or provisional pilot school certificate and ratings.

§ 141.53 Training course outline: General.

(a) *General.* An applicant for a pilot school or provisional pilot school certificate must obtain the Administrator's approval of the outline of each training course for which certification and rating is sought.

(b) *Application.* An application for the approval of an initial or amended training course outline is made in triplicate to the FAA District Office having jurisdiction over the area in which the operations base of the applicant is located. It must be made at least 30 days before any training under that course, or any amendment thereto, is scheduled to begin. An application for an amendment to an approved training course must be accompanied by three copies of the pages in the course outline for which an amendment is requested.

§ 141.55 Training course outline: Contents.

(a) *General.* The outline for each course of training for which approval is requested must meet the minimum curriculum for that course prescribed in the appropriate appendix of this part, and contain the following information:

(1) A description of each room used for ground training, including its size and the maximum number of students that may be instructed in the room at one time.

(2) A description of each type of audio-visual aid, projector, tape recorder, mockup, aircraft component and other special training aid used for ground training.

(3) A description of each pilot ground trainer used for instruction.

(4) A listing of the airports at which training flights originate and a description of the facilities, including pilot briefing areas that are available

for use by the students and operating personnel at each of those airports.

(5) A description of the type of aircraft including any special equipment, used for each phase of instruction.

(6) The minimum qualifications and ratings for each instructor used for ground or flight training.

(b) *Training syllabus.* In addition to the items specified in paragraph (a) of this section, the course outline must include a training syllabus for each course of training that includes at least the following information:

(1) The pilot certificate and ratings, if any; the medical certificate, if necessary; and the training, pilot experience and knowledge, required for enrollment in the course.

(2) A description of each lesson, including its objectives and standards and the measurable unit of student accomplishment or learning to be derived from the lesson or course.

(3) The stage of training (including the standards therefor) normally accomplished within each training period of not more than 90 days.

(4) A description of the tests and checks used to measure a student's accomplishment for each stage of training.

§ 141.57 Special curricula.

An applicant for a pilot school or provisional pilot school certificate may apply for approval to conduct a special course of pilot training for which a curriculum is not prescribed in the appendixes to this part, if it shows that the special course of pilot training contains features which can be expected to achieve a level of pilot competency equivalent to that achieved by the curriculum prescribed in the appendixes to this part or the requirements of Part 61 of this chapter.

Subpart D—Examining Authority

§ 141.61 Applicability.

This subpart prescribes the requirements for the issuance of an examining authority to the holder of a pilot school certificate and the privileges and limitations of that authority.

§ 141.63 Application and qualification.

(a) Application for an examining authority is made on a form and in a manner prescribed by the Administrator.

(b) To be eligible for an examining authority an applicant must hold a pilot school certificate. In addition, the applicant must show that—

(1) It has actively conducted a certificated pilot school for at least 24 months before the date of application; and

(2) Within the 24 months before the date of application for the examining authority, at least 10 students were graduated from the course for which the authority is requested, and at least 9 of the most recent 10 graduates of that course, who were given an interim or final test by an FAA inspector or a designated pilot examiner, passed that test the first time.

§ 141.65 Privileges.

The holder of an examining authority may recommend graduates of the school's approved certification courses for pilot certificates and ratings except flight instructor certificates, airline transport pilot certificates and ratings, and turbojet type ratings, without taking the FAA flight or written test, or both, in accordance with the provisions of this subpart.

§ 141.67 Limitations and reports.

(a) The holder of an examining authority may not recommend any person for the issuance of a pilot certificate or rating without taking the FAA written or flight test unless that person has—

(1) Been enrolled by the holder of the examining authority in its approved course of training for the particular pilot certificate or rating recommended; and

(2) Satisfactorily completed all of that course of training at its school.

(b) Each final written or flight test given by the holder of an examining authority to a person who has completed the approved course of training must be at least equal in scope, depth, and difficulty to the comparable written or flight test prescribed by the Administrator under Part 61 of this chapter.

(c) A final ground school written test may not be given by the holder of an examining authority to a student enrolled in its approved course of training unless the test has been approved by the FAA District Office having jurisdiction over the area in which the holder of the examining authority is located. In addition, an approved test may not be given by the holder of an examining authority when—

(1) It knows or has reason to believe that the test has been compromised; or

(2) It has been notified that the District Office knows or has reason to believe that the test has been compromised.

(d) The holder of an examining authority shall submit to the FAA District Office a copy of the appropriate training record for each person recommended by it for a pilot certificate or rating.

Subpart E—Operating Rules

§ 141.71 Applicability.

This subpart prescribes the operating rules that are applicable to a pilot school or provisional pilot school certificated under the provisions of this part.

§ 141.73 Privileges.

(a) The holder of a pilot school or a provisional pilot school certificate may advertise and conduct approved pilot training courses in accordance with the certificate and ratings that it holds.

(b) A certificate pilot school holding an examining authority for a certification course may recommend each graduate of that course for the issuance of a pilot certificate and rating appropriate to that course without the necessity of taking an FAA written or flight test from an FAA inspector or designated pilot examiner.

§ 141.75 Aircraft requirements.

(a) A pretakeoff and prelanding checklist, and the operator's handbook for the aircraft (if one is furnished by the manufacturer) or copies of the handbook if furnished to each student using the aircraft, must be carried on each aircraft used for flight instruction and solo flights.

(b) Each aircraft used for flight instruction and solo flight must have a standard airworthiness certificate, except that an aircraft certificated in the restricted category may be used for flight training and solo flights conducted under special courses for agricultural aircraft operation, external load operations, and similar aerial work operations if its use for training is not prohibited by the operating limitations for the aircraft.

§ 141.77 Limitations.

(a) The holder of a pilot school or a provisional pilot school certificate may not issue a graduation certificate to a student, nor may a certificated pilot school recommend a student for a pilot certificate or rating, unless the student has completed the training therefor specified in the school's course of training and passed the required final tests.

(b) The holder of a pilot school or a provisional pilot school certificate may not graduate a student from a course of training unless he has completed all of the curriculum requirements of that course. A student may be credited, but not for more than one-half of the curriculum requirements, with previous pilot experience and knowledge, based upon an appropriate flight check or test by the school. Course credits may be transferred from one certificated school to another. The receiving school shall determine the amount to be transferred, based on a flight check or written test, or both, of the student. Credit for training and instruction received in another school may not be given unless—

(1) The other school holds a certificate issued under this part and certifies to the kind and amount of training and to the result of each stage and final test given to that student;

(2) The training and instruction was conducted by the other school in accordance with that school's approved training course; and

(3) The student was enrolled in the other school's approved training

course before he received the instruction and training.

§ 141.79 Flight instruction.

(a) No person other than a flight instructor who has the ratings and the minimum qualifications specified in the approved training course outline may give a student flight instruction under an approved course of training.

(b) No student pilot may be authorized to start a solo practice flight from an airport until the flight has been approved by an authorized flight instructor who is present at that airport.

(c) Each chief flight instructor must complete at least once each 12 months, a flight instructor refresher course consisting of not less than 24 hours of ground or flight instruction, or both.

(d) Each flight instructor for an approved course of training must satisfactorily accomplish a flight check given to him by the designated chief flight instructor for the school by whom he is employed. He must also satisfactorily accomplish this flight check each 12 months from the month in which the initial check is given. In addition, he must satisfactorily accomplish a flight check in each type of aircraft in which he gives instruction.

(e) An instructor may not be used in an approved course of training until he has been briefed in regard to the objectives and standards of the course by the designated chief instructor or his assistant.

§ 141.81 Ground training.

(a) Except as provided in paragraph (b) of this section, each instructor used for ground training in an approved course of training must hold a flight or ground instructor certificate with an appropriate rating for the course of training.

(b) A person who does not meet the requirements of paragraph (a) of this section may be used for ground training in an approved course of training if—

(1) The chief instructor for that course of training finds him qualified to give that instruction; and

(2) The instruction is given under the direct supervision of the chief instructor or the assistant chief instructor who is present at the base when the instruction is given.

(c) An instructor may not be used in an approved course of training until he has been briefed in regard to the objectives and standards of that course by the designated chief instructor or his assistant.

§ 141.83 Quality of instruction.

(a) Each holder of a pilot school or provisional pilot school certificate must comply with the approved course of training and must provide training and instruction of such quality that at least 8 out of the 10 students or graduates of that school most recently tested by an FAA inspector or designated pilot examiner, passed on their first attempt either of the following tests:

(1) A test for a pilot certificate or rating, or for an operating privilege appropriate to the course from which the student graduated; or

(2) A test given to a student to determine his competence and knowledge of a completed stage of the training course in which he is enrolled.

(b) The failure of a certificated pilot school or provisional pilot school to maintain the quality of instruction specified in paragraph (a) of this section is considered to be the basis for the suspension or revocation of the certificate held by that school.

(c) The holder of a pilot school or provisional pilot school certificate shall allow the Administrator to make any test, flight check, or examination of its students to determine compliance with its approved course of training and the quality of its instruction and training. A flight check conducted under the provisions of this paragraph is based upon the standards prescribed in the school's approved course of training. However, if the student has completed a course of training for a pilot certificate or rating, the flight test is based upon the standards prescribed in Part 61 of this chapter.

§ 141.85 Chief instructor responsibilities.

(a) Each person designated as a chief instructor for a certificated pilot school or provisional pilot school shall be responsible for—

(1) Certifying training records, graduation certificates, stage and final test reports, and student recommendations;

(2) Conducting an initial proficiency check of each instructor before he is used in an approved course of instruction and, thereafter, at least once each 12 months from the month in which the initial check was conducted;

(3) Conducting each stage or final test given to a student enrolled in an approved course of instruction; and

(4) Maintaining training techniques, procedures, and standards for the school that are acceptable to the Administrator.

(b) The chief instructor or his designated assistant shall be available at the school's base of operations during the time that instruction is given for an approved course of training.

§ 141.87 Change of chief instructor.

(a) The holder of a pilot school or provisional pilot school certificate shall immediately notify in writing the FAA District Office having jurisdiction over the area in which the school is located, of any change in its designation of a chief instructor of an approved training course.

(b) The holder of a pilot school or provisional pilot school certificate may, after providing the notification required in paragraph (a) of this section and pending the designation and approval of another chief instructor, conduct training or instruction without a chief instructor for that course of training for a period of not more than 60 days. However, during that time each stage or final test of a student enrolled in that approved course of training must be given by an FAA inspector, or a designated pilot examiner.

§ 141.89 Maintenance of personnel, facilities, and equipment.

The holder of a pilot school or provisional pilot school certificate may not give instruction or training to a student who is enrolled in an approved course of training unless—

(a) Each airport, aircraft, and facility necessary for that instruction or training meets the standards specified in the holder's approved training course outline and the appropriate requirements of this part; and

(b) Except as provided in § 141.87, each instructor or chief instructor meets the qualifications specified in the holder's approved course of training and the appropriate requirements of this part.

§ 141.91 Satellite bases.

The holder of a pilot school or provisional pilot school certificate may conduct ground or flight training and instruction in an approved course of training at a base other than its main operations base if—

(a) The satellite base is located not more than 25 nautical miles from its main operations base;

(b) The airport, facilities, and personnel used at the satellite base meet the appropriate requirements of Subpart B of this part and its approved training course outline;

(c) The instructors are under the direct supervision of the chief instructor for the appropriate training course, who is readily available for consultation; and

(d) The FAA District Office having juridiction over the area in which the school is located is notified in writing if training or instruction is conducted there for more than seven consecutive days.

§ 141.93 Enrollment.

(a) The holder of a pilot school or a provisional pilot school certificate shall furnish each student, at the time he is enrolled in each approved training course, with the following:

(1) A certificate of enrollment containing—

(i) The name of the course in which he is enrolled; and

(ii) The date of that enrollment.

(2) A copy of the training syllabus required under § 141.55(b).

(3) A copy of the safety procedures and practices developed by the school covering the use of its facilities and the operation of its aircraft, including instructions on the following:

(i) The weather minimums required by the school for dual and solo flights.

(ii) The procedures for starting and taxiing aircraft on the ramp.

(iii) Fire precautions and procedures.

(iv) Redispatch procedures after unprogrammed landings, on and off airports.

(v) Aircraft discrepancies and write offs.

(vi) Securing of aircraft when not in use.

(vii) Fuel reserves necessary for local and cross-country flights.

(viii) Avoidance of other aircraft in flight and on the ground.

(ix) Minimum altitude limitations and simulated emergency landing instructions.

(x) Description and use of assigned practice areas.

(b) The holder of a pilot school or provisional pilot school certificate shall, within 5 days after the date of enrollment, forward a copy of each certificate of enrollment required by paragraph (a)(1) of this section to the FAA District Office having jurisdiction over the area in which the school is located.

§ 141.95 Graduation certificate.

(a) The holder of a pilot school or provisional pilot school certificate shall issue a graduation certificate to each student who completes its approved course of training.

(b) The certificate shall be issued to the student upon his completion of the course of training and contain at least the following information:

(1) The name of the school and the number of the school certificate.

(2) The name of the graduate to whom it was issued.

(3) The course of training for which it was issued.

(4) The date of graduation.

(5) A statement that the student has satisfactorily completed each required stage of the approved course of training including the tests for those stages.

(6) A certification of the information contained in the certificate by the chief instructor for that course of training.

(7) A statement showing the cross-country training the student received in the course of training.

Subpart F—Records

§ 141.101 Training records.

(a) Each holder of a pilot school or provisional pilot school certificate shall establish and maintain a current and accurate record of the participation and accomplishment of each student enrolled in an approved course of training conducted by the school (the student's logbook is not acceptable for this record). The record shall include—

(1) The date the student was enrolled;

(2) A chronological log of the student's attendance, subjects, and flight operations covered in his training and instruction, and the names and grades of any tests taken by the student; and

(3) The date the student graduated, terminated his training, or transferred to another school.

(b) Whenever a student graduates, terminates his training, or transfers to another school, his record shall be certified to that effect by the chief instructor.

(c) The holder of a certificate for a pilot school or a provisional pilot school shall retain each student record required by this section for at least 1 year from the date that the student graduates from the course to which the record pertains, terminates his enrollment in that course, or transfers to another school.

(d) The holder of a certificate for a pilot school or a provisional pilot school shall, upon request of a student, make a copy of his record available to him.

APPENDIX A—PRIVATE PILOT CERTIFICATION COURSE (AIRPLANES)

1. *Applicability.* This Appendix prescribes the minimum curriculum for a private pilot certification course (airplanes) required by § 141.55.

2. *Ground training.* The course must consist of at least 35 hours of ground training in the following subjects:

(a) The Federal Aviation Regulations applicable to private pilot privileges, limitations, and flight operations; the rules of the National Transportation Safety Board pertaining to accident reporting; the use of the

Airman's Information Manual; and the FAA Advisory Circular System.

(b) VFR navigation using pilotage, dead reckoning, and radio aids.

(c) The recognition of critical weather situations from the ground and in flight and the procurement and use of aeronautical weather reports and forecasts.

(d) The safe and efficient operation of airplanes, including high density airport operations, collision avoidance precautions, and radio communication procedures.

3. *Flight training.*

(a) The course must consist of at least 35 hours of the flight training listed in this section and section 4 of this Appendix. Instruction in a pilot ground trainer that meets the requirements of § 141.41(a)(1) may be credited for not more than 5 of the required 35 hours of flight time. Instruction in a pilot ground trainer that meets the requirement of § 141.41(a)(2) may be credited for not more than 2.5 hours of the required 35 hours of flight time.

(b) Each training flight must include a preflight briefing and a postflight critique of the student by the instructor assigned to that flight.

(c) Flight training must consist of at least 20 hours of instruction in the following subjects:

(1) Preflight operations, including weight and balance determination, line inspection, starting and runups, and airplane servicing.

(2) Airport and traffic pattern operations, including operations at controlled airports, radio communications, and collision avoidance precautions.

(3) Flight maneuvering by reference to ground objects.

(4) Flight at critically slow airspeeds, recognition of imminent stalls, and recovery from imminent and full stalls.

(5) Normal and crosswind takeoffs and landings.

(6) Control and maneuvering an airplane solely by reference to instruments, including emergency descents and climbs using radio aids or radar directives.

(7) Cross-country flying using pilotage, dead reckoning, and radio aids, including a two-hour dual flight at least part of which must be on Federal airways.

(8) Maximum performance takeoffs and landings.

(9) Night flying, including 5 takeoffs and landings as sole manipulator of the controls, and VFR navigation.

(10) Emergency operations, including simulated aircraft and equipment malfunctions, lost procedures, and emergency go-arounds.

4. *Solo flights.* The course must provide at least 15 hours of solo flights, including:

(a) *Solo practice.* Directed solo practice on all VFR flight operations for which flight instruction is required (except simulated emergencies) to develop proficiency, resourcefulness, and self-reliance.

(b) *Cross-country flights.* (1) Ten hours of cross-country flights, each flight with a landing at a point more than 50 nautical miles from the original departure point. One flight must be of at least 300 nautical miles with landings at a minimum of three points, one of which is at least 100 nautical miles from the original departure point.

(2) If a pilot school or a provisional pilot school shows that it is located on an island from which cross-country flights cannot be accomplished without flying over water more than 10 nautical miles from the nearest shoreline, it need not include cross-country flights under paragraph (1) of this paragraph. However, if other airports that permit civil operations are available to which a flight may be made without flying over water more than 10 nautical miles from the nearest shoreline, the school must include in its course, two round trip solo flights between those airports that are farthest apart, including a landing at each airport on both flights.

5. *Stage and final tests.* (a) Each student enrolled in a private pilot certification course must satisfactorily accomplish the stage and final tests prescribed in this section. The written tests may not be credited for more than 3 hours of the 35 hours of required ground training, and the flight tests may not be credited for more than 4 hours of the 35 hours of required flight training.

(b) Each student must satisfactorily accomplish a written examination at the completion of each stage of training specified in the approved training syllabus for the private pilot certification course and a final test at the conclusion of that course.

(c) Each student must satisfactorily accomplish a flight test at the completion of the first solo flight and at the completion of the first solo cross-country flight and at the conclusion of that course.

[Doc. No. 12547, 39 FR 20152, June 6, 1974; 39 FR 25473, July 11, 1974, as amended by Amdt. 141-1, 47 FR 46066, Oct. 14, 1982]

APPENDIX B—PRIVATE TEST COURSE (AIRPLANES)

1. ***Applicability.*** This Appendix prescribes the minimum curriculum for a private test course (airplanes) required by § 141.55.

2. ***Experience.*** For enrollment as a student in a private test course (airplanes) an applicant must—

(a) Have logged at least 30 hours of flight time as a pilot; and

(b) Have such experience and flight training that upon completion of his approved private test course (airplanes) he will meet the aeronautical experience requirements prescribed in Part 61 of this chapter for a private pilot certificate.

3. *Ground training.* The course must consist of at least 35 hours of ground training in the subjects listed in section 2 of Appendix A of this part.

4. *Flight training.* (a) The course must consist of a total of at least 10 hours of flight instruction in the subjects listed in section 3(c) of Appendix A of this part.

(b) Each training flight must include a preflight briefing and a postflight critique of the student by the instructor assigned to that flight.

5. *Stage and final tests.* Each student enrolled in the course must satisfactorily accomplish the final tests prescribed in § 5 of Appendix A of this part. Written tests may not be credited for more than 3 hours of the required 35 hours of ground training, and the flight tests may not be credited for more than 2 hours of the required 10 hours of flight training.

APPENDIX C—INSTRUMENT RATING COURSE (AIRPLANES)

1. *Applicability.* This Appendix prescribes the minimum curriculum for a training course for an Instrument Rating Course (airplanes) required by § 141.55.

2. *Ground training.* The course must consist of at least 30 hours of ground training instruction in the following subjects:

(a) The Federal Aviation Regulations that apply to flight under IFR conditions, the IFR air traffic system and procedures, and the provisions of the Airman's Information Manual pertinent to IFR flights.

(b) Dead reckoning appropriate to IFR navigation, IFR navigation by radio aids using the VOR, ADF, and ILS systems, and the use of IFR charts and instrument approach procedure charts.

(c) The procurement and use of aviation weather reports and forecasts, and the elements of forecasting weather trends on the basis of that information and personal observation of weather conditions.

(d) The function, use, and limitations of flight instruments required for IFR flight, including transponders, radar and radio aids to navigation.

3. *Flight training.* The course must consist of at least 35 hours of instrument flight instruction given by an appropriately rated flight instructor, covering the operations listed in paragraphs (a) through (d) of this section. Instruction given by an authorized instructor in a pilot ground trainer which meets the requirements of § 141.41(a)(1) may be credited for not more than 15 hours of the required flight instruction. Instruction in a pilot ground trainer that meets the requirements of § 141.41(a)(2) may be credited for not more than 7.5 of the required 35 hours of flight time.

(a) Control and accurate maneuvering of an airplane solely by reference to flight instruments.

(b) IFR navigation by the use of VOR and ADF systems, including time, speed and distance computations and compliance with air traffic control instructions and procedures.

(c) Instrument approaches to published minimums using the VOR, ADF, and ILS systems (instruction in the use of the ILS glide slope may be given in an instrument ground trainer or with an airborne ILS simulator).

(d) Cross-country flying in simulated or actual IFR conditions, on Federal airways or as routed by ATC, including one such trip of at least 250 nautical miles including VOR, ADF, and ILS approaches at different airports.

(e) Emergency procedures appropriate to the maneuvering of an airplane solely by reference to flight instruments.

4. *Stage and final tests.*

(a) Each student must satisfactorily accomplish a written test at the completion of each stage of training specified in the approved training syllabus for the instrument rating course. In addition, he must satisfactorily accomplish a final written test at the conclusion of that course. The written tests may not be credited for more than 5 hours of the 30 hours of required ground training.

(b) Each student must satisfactorily accomplish a flight stage test at the completion of each operation listed in paragraphs (a), (b), and (c) of section 3 of this Appendix. In addition, he must satisfactorily accomplish a final flight test at the completion of the course. The stage and final tests may not be credited for more than 5 hours of the required 35 hours of flight training.

APPENDIX D—COMMERCIAL PILOT CERTIFICATION COURSE (AIRPLANES)

1. *Applicability.* This Appendix prescribes the minimum curriculum for a commercial pilot certification course (airplanes) required by § 141.55.

2. *Ground training.* The course must consist of at least 100 hours of ground training instruction in the following subjects:

(a) The ground training subjects prescribed in section 2 of Appendix A of this part for a private pilot certification course, except the private pilot privileges and limitations of paragraph (a) of that section.

(b) The ground training subjects prescribed in section 2 of Appendix C of this Part 141 for an Instrument Rating Course.

(c) The Federal Aviation Regulations covering the privileges, limitations, and operations of a commercial pilot, and the operations for which an air taxi/commercial operator, agricultural aircraft operator, and external load operator certificate, waiver, or exemption is required.

(d) Basic aerodynamics, and the principles of flight which apply to airplanes.

(e) The safe and efficient operation of airplanes, including inspection and certification requirements, operating limitations, high altitude operations and physiological considerations, loading computations, the significance of the use of airplane performance speeds, the computations involved in runway and obstacle clearance and crosswind component considerations, and cruise control.

3. *Flight training*—(a) *General.* The course must consist of at least 190 hours of the flight training and instruction prescribed in this section. Instruction in a pilot ground trainer that meets the requirements of § 141.41(a)(1) may be credited for not more than 40 hours of the required 190 hours of flight time. Instruction in a pilot ground trainer that meets the requirements of § 141.41(a)(2) may be credited for not more than 20 hours of the required 190 hours of flight time.

(b) *Flight instruction.* The course must consist of at least 75 hours of instruction in the operations listed in subparagraphs (1) through (6) of this paragraph. Instruction in a pilot ground trainer that meets the requirements of § 141.41(a)(1) may be credited for not more than 20 hours of the required 75 hours. Instruction in a pilot ground trainer that meets the requirements of § 141.41(a)(2) may be credited for not more than 10 hours of the required 75 hours.

(1) The pilot operations for the Private Pilot Course prescribed in section 3 of Appendix A of this part.

(2) The IFR operations for the Instrument Rating Course prescribed in section 3 of Appendix C of this part.

(3) Ten hours of flight instruction in an airplane with retractable gear, flaps, a controllable propeller, and powered by at least 180 hp. engine.

(4) Night flying, including a cross-country night flight with a landing at a point more than 100 miles from the point of departure.

(5) Normal and maximum performance takeoffs and landings using precision approaches and prescribed airplane performance speeds, including operations at maximum authorized takeoff weight.

(6) Emergency procedures appropriate to VFR and IFR flight and to the operation of complex airplane systems.

(c) *Solo practice.* The course must consist of at least 100 hours of the flights listed in paragraphs (1) through (4) of this paragraph. Flight time as pilot in command of an airplane carrying only those persons who are pilots assigned by the school to specific flight crew duties on the flight may be credited for not more than 50 hours of that requirement.

(1) Directed solo practice on each VFR operation for which flight instruction is required (except simulated emergencies).

(2) At least 40 hours of solo cross-country flights, each flight with a landing at a point more than 50 nautical miles from the original departure point. One flight must have landings at a minimum of three points, one of which is at least 150 nautical miles from the original departure point if the flight is conducted in Hawaii, or at least 250 nautical miles from the original departure point if it is conducted elsewhere.

(3) At least 5 hours of pilot in command time in an airplane described in paragraph (b)(3) of this section, including not less than 10 takeoffs and 10 landings to a full stop.

(4) At least 5 hours of night flight, including at least 10 takeoffs and 10 landings to a full stop.

4. *Stage and final tests*—(a) *Written examinations.* Each student enrolled in the course must satisfactorily accomplish a written test upon the completion of each stage of training specified in the approved training syllabus for the commercial pilot certification course. In addition, he must satisfactorily accomplish a final stage test at the completion of all of that course. The stage and final tests may be credited for not more than 6 hours of the required 100 hours of ground training.

(b) *Flight tests.* Each student enrolled in a commercial pilot certification course (airplanes) must satisfactorily accomplish a stage flight test at the completion of each of the stages listed in paragraphs (1), (2), (3), (4), and (5), of this paragraph. In addition, he must satisfactorily accomplish a final test at the completion of all of those stages. The stage and final tests may not be credited for more than 10 hours of the required 190 hours of flight training.

(1) Solo.

(2) Cross-country.

(3) High performance airplane operations.

(4) IFR operations.

(5) Commercial Pilot Course test, VFR and IFR.

[Doc. No. 12547, 39 FR 20152, June 6, 1974, as amended by Amdt. 141-1, 47 FR 46066, Oct. 14, 1982]

APPENDIX E—COMMERCIAL TEST COURSE (AIRPLANES)

1. *Applicability.* This Appendix prescribes the minimum curriculum for a commercial test course (airplanes) required by § 141.55.

2. *Experience.* For enrollment as a student in a commercial test course (airplanes) an applicant must—

(a) Hold a valid private pilot certificate;

(b) Hold a valid instrument rating, or be enrolled in an approved instrument rating course; and

(c) Have such experience and flight training that upon completion of his approved commercial test course he will meet the aeronautical experience requirements prescribed in Part 61 of this chapter for a commercial pilot certificate.

3. *Ground training.* The course must consist of at least 50 hours of ground training instruction in the following subjects:

(a) A review of the ground training subjects prescribed in section 2 of Appendix A of this Part 141 for a private pilot certification.

(b) A review of the ground training subjects prescribed in section 2 of Appendix C of this Part 141 for an instrument rating course.

(c) The Federal Aviation Regulations covering the privileges, limitations, and operations of a commercial pilot, and the operations for which an air taxi/commercial operator, agricultural aircraft operator, and external load operator certificate, waiver or exemption is required.

(d) Basic aerodynamics, and the principles of flight that apply to airplanes.

(e) The safe and efficient operation of airplanes, including inspection and certification requirements, operating limitations, high altitude operations and psysiological considerations, loading computations, the significance and use of airplane performance speeds, and computations involved in runway and obstacle clearance and crosswind component considerations.

4. *Flight training*—(a) *General.* The course must consist of at least 25 hours of flight training prescribed in this section. Instruction in a pilot ground trainer that meets the requirements of § 141.41(a)(1) may be credited for not more than 20 per cent of the total number of hours of flight time. Instruction in a pilot ground trainer that meets the requirements of § 141.41(a)(2) may be credited for not more than 10 per cent of the total number of hours of flight time.

(b) *Flight instruction.* The course must consist of at least 20 hours of flight instruction in the subjects listed in subparagraphs (1) through (3) of this paragraph. Instruction in a ground trainer that meets the requirements of § 141.41(a)(1) may be credited for not more than 4 hours of the required 20 hours. Instruction in a ground trainer that meets the requirements of § 141.41(a)(2) may be credited for not more than 2 hours of the required 20 hours.

(1) A review of the VFR operations prescribed in section 3 of Appendix A of this part for a private course.

(2) A review of the IFR operations prescribed in section 3 of Appendix C of this part for an instrument rating course.

(3) A review of the VFR operations prescribed in section 3(b)(3) through (6) of Appendix D of this part for a commercial pilot certification course.

(c) *Directed solo practice.* If the course includes directed solo practice necessary to develop the flight proficiency of each student, the practice may not exceed a ratio of 3 hours of directed solo practice for each hour of the flight instruction required by the school's approved course outline.

5. *Stage and final tests*—(a) *Written tests.* Each student enrolled in the course must satisfactorily accomplish a stage test upon the completion of each stage of training specified in the approved training syllabus for the commercial test course. In addition, he must satisfactorily accomplish a final test at the conclusion of that course. The stage and final tests may not be credited for more than 4 hours of the required 50 hours of ground training.

(b) *Flight tests.* Each student enrolled in the course must satisfactorily accomplish a final test at the completion of the course. However, if the approved course of training exceeds 35 hours he must be given a test at an appropriate stage prior to completon of 35 hours of flight training. The flight tests may not be credited for more than 3 of the required hours of flight training.

(c) *Total flight experience.* The approved training course outline must specify the minimum number of hours of flight instruction and directed solo practice (if any) that is provided for each student under the requirements of paragraphs (b) and (c) of section 4 of this appendix. The total number of hours of all flight training given to a student under this section and the minimum experience required for enrollment under section 2 of this appendix must meet the minimum aeronautical experience requirements of § 61.129 of this chapter for the issuance of a commercial pilot certificate.

APPENDIX F—ROTORCRAFT, GLIDERS, LIGHTER-THAN-AIR AIRCRAFT AND AIRCRAFT RATING COURSES

A. *Applicability.* This appendix prescribes the minimum curriculum for a pilot certification course for a rotorcraft, glider, lighter-than-air aircraft, or aircraft rating, required by § 141.55.

B. *General Requirements.* The course must be comparable in scope, depth, and detail with the curriculum prescribed in Appendices A through D of this part for a pilot certification course (airplanes) with the same rating. Each course must provide ground and flight training covering the aeronautical knowledge and skill items required by Part 61 of this chapter for the certificate or rating concerned. In addition, each course must meet the appropriate requirements of this appendix.

C. *Rotorcraft*—I. *Kinds of rotorcraft pilot certification courses.* An approved rotorcraft pilot certification course includes—

(a) A helicopter or gyroplane course—private pilots;

(b) A helicopter or gyroplane course—commercial pilots; and

(c) An instrument rating—helicopter.

II. *Helicopter or gyroplane course: Private pilots.*

(a) A private pilot certification course for helicopters or gyroplanes must consist of at least the following:

(1) Ground training—35 hours.

(2) Flight training—35 hours, including the following:

(i) Flight instruction—20 hours.

(ii) Solo practice—10 hours, including a flight with landings at three points, each of which is more than 25 nautical miles from the other two points.

(b) Stage and final tests may be credited for not more than 3 hours of the 35 hours of ground training, and for not more than 4 hours of the 35 hours of flight training required by paragraphs (a)(1) and (a)(2) of this section.

III. *Helicopter or gyroplane course—commercial pilots.* (a) A commercial pilot certification course of training for helicopters or gyroplanes must consist of at least the following:

(1) Ground training—65 hours.

(2) Flight training—150 hours of flight training at least 50 hours of which must be in helicopters or gyroplanes.

The flight training must include the following:

(i) Flight instruction—50 hours.

(ii) Directed solo—100 hours (including a cross-country flight with landings at three points, each of which is more than 50 nautical miles from the other two points).

(b) Stage and final tests may be credited for not more than 5 hours of the required 65 hours of ground training, and for not more than 7 hours of the required 150 hours of flight training prescribed in paragraphs (a)(1) and (a)(2) of this section.

IV. *Instrument rating—helicopter course.* (a) An instrument rating—helicopter course of training must consist of at least the following:

(1) Ground training—35 hours.

(2) Instrument flight training—35 hours. Instrument instruction in a pilot ground trainer that meets the requirements of § 141.41(a)(1) may be credited for not more than 10 hours of the required 35 hours of flight training. Instruction in a ground trainer that meets the requirements of § 141.41(a)(2) may be credited for not more than 5 hours of the required 35 hours. The instrument flight instruction must include a 100-mile simulated or actual IFR cross-country flight, and 25 hours of flight instruction.

(3) Stage and final tests may be credited for not more than 5 hours of the 35 hours of required ground training, and not more than 5 hours of the 35 hours of instrument training.

D. *Gliders*—I. *Kinds of glider pilot certification courses.* An approved glider certification course includes—

(a) A glider course—private pilots; and

(b) A glider course—commercial pilots.

II. *Glider course: Private pilot.* A private pilot certification course for gliders must consist of at least the following:

(a) Ground training—15 hours.

(b) Flight training—8 hours (including 35 flights if ground tows are used, or 20 flights if aero tows are used). The flight training must include the following:

(1) Flight instruction—2 hours (including 20 flights if ground tows are used or 15 flights if aero tows are used).

(2) Directed solo—5 hours (including at least 15 flights if ground tows are used or 5 flights if aero tows are used).

(c) Stage and flight tests may be credited for not more than one hour of the 15 hours of ground training, and for not more than one-half hour of the 2 hours of flight instruction required by paragraphs (a)(1) and (a)(2) of this section.

III. *Glider course: Commercial pilot.* (a) An approved commercial pilot certification course for gliders must consist of at least the following:

(1) Ground training—25 hours.

(2) Flight training—20 hours of flight time in gliders (consisting of at least 50 flights), including the following:

(i) Flight instruction—8 hours.

(ii) Directed solo—10 hours.

(b) Stage and final tests may be credited for not more than 2 hours of the 25 hours of ground training, and for not more than 2 hours of the 20 hours of flight training required by paragraphs (a)(1) and (a)(2) of this section.

E. *Lighter-than-air aircraft*—I. *Kinds of lighter-than-air pilot certification courses.* An approved lighter-than-air pilot certification course includes—

(a) An airship course—private pilot;

(b) A free balloon course—private pilot;

(c) An airship course—commercial pilot; and

(d) A free balloon course—commercial pilot.

II. *Airship—private pilot.* (a) A private pilot certification course for an airship must consist of at least the following:

(1) Ground training—35 hours.

(2) Flight training—50 hours (45 hours must be in airships), including the following:

(i) Flight instruction—20 hours in airships.

(ii) Directed solo, or performing the functions of a pilot in command of an airship for which more than one pilot is required—10 hours.

(b) Stage and final tests may be credited for not more than 5 hours of the 35 hours of ground training, and not more than 5 hours of the 50 hours of flight training required by paragraphs (a)(1) and (a)(2) of this section.

III. *Free balloon course: private pilot.* (a) A private pilot course for a free balloon must consist of at least the following:

(1) Ground training—10 hours.

(2) Flight training—6 free flights, including—

(i) Two flights of one hour duration each if a gas balloon is used, or of 30 minutes duration if a hot air balloon is used;

(ii) At least one solo flight; and

(iii) One ascent under control to 5,000 feet above the point of takeoff if a gas balloon is used, or 3,000 feet above the point of takeoff if a hot air balloon is used.

(b) The written and stage checks may be credited for not more than one hour of the ground training, and not more than one of the 6 flights required by paragraph (a)(1) and (a)(2) of this section.

IV. *Airship course—commercial pilot.* (a) A commercial pilot course for an airship must consist of at least the following:

(1) Ground training—100 hours.

(2) Flight training—190 hours in airships as follows:

(i) Flight instruction—80 hours, including 30 hours instrument time.

(ii) 100 hours of solo time, or flight time performing the functions of a pilot in command in an airship that requires more than one pilot, including 10 hours of cross-country flying and 10 hours of night flying.

(b) Stage and final tests may be credited for not more than 6 hours of the 100 hours of ground training, and not more than 10 hours of the 190 hours of flight training required by paragraphs (a)(1) and (a)(2), respectively, of this section.

V. *Free balloon course: commercial pilot.* (a) A commercial pilot certification course for free balloons must consist of at least the following:

(1) Ground training—20 hours.

(2) Flight training—8 free flights, including—

(i) 2 flights of more than 2 hours duration if a gas balloon is used, or 2 flights of more than 1 hour duration if a hot air balloon is used;

(ii) 1 ascent under control to more than 10,000 feet above the takeoff point if a gas balloon is used, or to more than 5,000 feet above the takeoff point if a hot air balloon is used; and

(iii) 2 solo flights.

(b) Stage and final tests may be credited for not more than 2 hours of the 20 hours of ground training, and not more than one of the flights required by paragraphs (a)(1) and (a)(2), respectively, of this section.

F. *Aircraft rating course*—I. *Kinds of aircraft rating courses.* An approved aircraft rating course includes—

(a) An aircraft category rating;

(b) An aircraft class rating; and

(c) An aircraft type rating.

II. *Aircraft category rating.* An aircraft category rating course must include at least the ground training and flight instruction required by Part 61 of this chapter for the issuance of a pilot certificate with a category rating appropriate to the course. However, the Administrator may approve a lesser number of hours of ground training, or flight instruction, or both, if the course provides for the use of special training aids, such as ground procedures, trainers, systems mockups, and audio-visual training materials, or requires appropriate aeronautical experience of the students as a prerequisite for enrollment in the course.

III. *Aircraft class rating.* An aircraft class rating course must include at least the flight instruction required by Part 61 of this chapter for the issuance of a pilot certificate with a class rating appropriate to the course.

IV. *Aircraft type rating.* An aircraft type rating course must include at least 10 hours of ground training on the aircraft systems, performance, operation, and loading. In addition, it must include at least 10 hours of flight instruction. Instruction in a pilot ground trainer that meets the requirements of § 141.41(a)(1) may be credited for not more than 5 of the 10 hours of required flight instruction. Instruction in a pilot ground trainer that meets the requirements of § 141.41(a)(2) may be credited for not more than 2.5 of the 10 hours of required flight instruction.

APPENDIX G—PILOT GROUND SCHOOL COURSE

1. *Applicability.* This appendix prescribes the minimum curriculum for a pilot ground school course required by § 141.55.

2. *General requirements.* An approved course of training for a pilot ground school course must contain the instruction necessary to provide each student with adequate knowledge of those subjects needed to safely exercise the privileges of the pilot certificate sought.

3. *Ground training instruction.* A pilot ground school course must include at least the subjects and the number of hours of ground training specified in the ground training section of the curriculum pre-

scribed in the appendixes to this part for the certification or test preparation course to which the ground school course is directed.

4. *Stage and final tests.* Each student must pass a written test at the completion of each stage of training specified in the approved training syllabus for each ground training course in which he is enrolled. In addition, he must pass a final written test at the completion of the course. The stage and final tests may be credited towards the total ground training time required for each certification and test preparation course as provided in the curriculum prescribed in the appendixes to this part for that course.

APPENDIX H—TEST PREPARATION COURSES

1. *Applicability.* This appendix prescribes the minimum curriculum required under § 141.55 of this Part 141 for each test preparation course listed in § 141.11.

2. *General requirements.*

(a) A test preparation course is eligible for approval if the Administrator determines that it is adequate for a student enrolled in that course, upon graduation, to safely exercise the privileges of the certificate, rating, or authority for which the course is conducted.

(b) Each course for a test preparation must be equivalent in scope, depth, and detail with the curriculum for the corresponding test course prescribed in Appendices A, B, C, and D of this Part 141. However, the number of hours of ground training and flight training included in the course must meet the curriculum prescribed in this appendix. (The minimums prescribed in this appendix for each test preparation course are based upon the amount of training that is required for students who meet the total flight experience requirements prescribed in Part 61 of this chapter at the time of enrollment.)

(c) Minimum experience, knowledge, or skill, requirements necessary as a prerequisite for enrollment are prescribed in the appropriate test preparation courses contained in this appendix.

3. *Flight instructor certification course.*

(a) An approved course of training for a flight instructor certification course must contain at least the following:

(1) *Ground training*—40 hours.

(2) *Instructor training*—25 hours, including—

(i) 10 hours of flight instruction in the analysis and performance of flight training maneuvers;

(ii) 5 hours of practice ground instruction; and

(iii) 10 hours of practice flight instruction (with the instructor in the aircraft).

(b) *Credit for previous training or experience:* A student may be credited with the following training and experience acquired before his enrollment in the course.

(1) Satisfactory completion of two years of study on the principles of education in a college or university may be credited for 20 hours of the required 40 hours of ground training prescribed in paragraph (a)(1) of this section.

(2) One year of experience as a full-time instructor in an institution of secondary or advanced education may be credited for 5 hours of the required practice ground instruction prescribed in paragraph (a)(2) of this section.

(c) *Prerequisite for enrollment.* To be eligible for enrollment each student must hold—

(1) A commercial pilot certificate;

(2) A rating for the aircraft used in the course; and

(3) An instrument rating for enrollment in an airplane instructor rating course.

4. *Additional flight instructor rating courses.*

(a) An approved course of training for an additional flight instructor rating course must consist of at least the following:

(1) *Ground training*—20 hours.

(2) *Instructor training (with an instructor in the aircraft).* 20 hours, including—

(i) 10 hours of analysis of flight training maneuvers, or, in the case of a glider instructor rating course, 10 flights in a glider; and

(ii) 10 hours of practice flight instruction, or, in the case of glider instructor rating course, 10 flights in a glider.

5. *Additional instrument rating course (airplane or helicopter).*

(a) An approved training course for an additional instrument rating course must include at least the following:

(1) *Ground training*—15 hours.

(2) *Flight instruction*—15 hours.

(b) *Prerequisites for enrollment.* To be eligible for enrollment each student must hold a valid pilot certificate with an instrument rating, and an aircraft rating for the aircraft used in the course.

6. *Airline transport pilot test course.*

(a) An approved training course for an airline transport pilot test course must include at least the following:

(1) *Ground training*—40 hours.

(2) *Flight instruction*—25 hours, including at least 15 hours of instrument flight instruction.

(b) *Prerequisites for enrollment.* To be eligible for enrollment each student must—

(1) Hold a commercial pilot certificate with an instrument rating and a rating for the aircraft used in the course; and

(2) Meet the experience requirements of Part 61 of this chapter for the issuance of an airline transport pilot certificate.

7. *Pilot certificate, aircraft or instrument rating refresher course.*

(a) An approved refresher training course for a pilot certificate, aircraft rating, or an instrument rating must contain at least the following:

(1) *Ground training*—4 hours.

(2) *Flight instruction*—6 hours, which may include not more than 2 hours of directed solo or pilot in command practice.

(b) *Prerequisites for enrollment.* To be eligible for enrollment each student must hold a valid pilot certificate with ratings appropriate to the refresher course.

8. *Agricultural aircraft operations course.*

(a) An approved training course for pilots of agricultural aircraft must include at least the following:

(1) *Ground training*—25 hours, including at least 15 hours on the handling of agricultural and industrial chemicals.

(2) *Flight instruction*—15 hours, which may include not more than 5 hours of directed solo practice.

(b) *Prerequisite for enrollment.* To be eligible for enrollment each student must hold a valid commercial pilot certificate with a rating for the aircraft used in the course.

9. *Rotorcraft external-load operations course.*

(a) An approved training course for pilots of a rotorcraft with an external-load must contain at least the following:

(1) *Ground training*—10 hours.

(2) *Flight instruction*—15 hours.

(b) *Prerequisite for enrollment.* To be eligible for enrollment each student must hold a valid commercial pilot certificate with a rating for the rotorcraft used in the course.

PART 143—GROUND INSTRUCTORS

Sec.

143.1 Applicability.
143.3 Application and issue.
143.5 Temporary certificate.
143.7 Duration of certificate.
143.8 Change of name: replacement of lost or destroyed certificate.
143.9 Eligibility requirements: General.
143.11 Knowledge requirements.
143.15 Tests: General procedures.
143.17 Re-testing after failure.
143.18 Written tests: Cheating or other unauthorized conduct.
143.19 Recent experience.
143.20 Applications, certificates, logbooks, reports, and records; falsification, reproduction, or alteration.
143.21 Display of certificate.
143.23 Change of address.

AUTHORITY: Secs. 313(a), 314, 601, and 607, 72 Stat. 752; 49 U.S.C. 1354(a), 1355, 1421, and 1427.

SOURCE: Docket No. 1157, 27 FR 6661, July 13, 1962, unless otherwise noted.

§ 143.1 Applicability.

This part prescribes the requirements for issuing ground instructor certificates and associated ratings and the general operating rules for the holders of those certificates and ratings.

§ 143.3 Application and issue.

(a) An application for a certificate and rating, or for an additional rating, under this part, is made on a form and in a manner prescribed by the Administrator. However, a person whose ground instructor certificate has been revoked may not apply for a new certificate for a period of one year after the effective date of the revocation unless the order of revocation provides otherwise.

(b) An applicant who meets the requirements of this part is entitled to an appropriate certificate with ratings naming the ground school subjects that he is authorized to teach.

(c) Unless authorized by the Administrator, a person whose ground instructor certificate is suspended may not apply for any rating to be added to that certificate during the period of suspension.

(d) Unless the order of revocation provides otherwise, a person whose ground instructor certificate is revoked may not apply for any ground instructor certificate for 1 year after the date of revocation.

[Doc. No. 1157, 27 FR 6661, July 13, 1962, as amended by Amdt. 143-2, 31 FR 13524, Oct. 20, 1966]

§ 143.5 Temporary certificate.

A certificate or rating effective for a period of not more than 90 days may be issued to a qualified applicant, pending the issue of the certificate or rating for which he applied.

§ 143.7 Duration of certificate.

(a) A certificate or rating issued under this part is effective until it is surrendered, suspended, or revoked.

(b) The holder of any certificate issued under this part that is suspended or revoked shall upon the Administrator's request, return it to the Administrator.

[Doc. No. 1157, 27 FR 6661, July 13, 1962, as amended by Amdt. 143-2, 31 FR 13524, Oct. 20, 1966]

§ 143.8 Change of name; replacement of lost or destroyed certificate.

(a) An application for a change of name on a certificate issued under this part must be accompanied by the applicant's current certificate and the marriage license, court order, or other document verifying the change. The documents are returned to the applicant after inspection.

(b) An application for a replacement of a lost or destroyed certificate is made by letter to the Department of Transportation, Federal Aviation Administration, Airman Certification Branch, Post Office Box 25082, Oklahoma City, Okla. 73125. The letter must—

(1) Contain the name in which the certificate was issued, the permanent mailing address (including zip code), social security number (if any), and date and place of birth of the certificate holder, and any available information regarding the grade, number, and date of issue of the certificate, and the ratings on it; and

(2) Be accompanied by a check or money order for $2, payable to the Federal Aviation Administration.

(c) A person whose certificate issued under this part has been lost may obtain a telegram from the FAA confirming that it was issued. The telegram may be carried as a certificate for a period not to exceed 60 days pending his receiving a duplicate certificate under paragraph (b) of this section, unless he has been notified that the certificate has been suspended or revoked. The request for such a telegram may be made by prepaid telegram, stating the date upon which a duplicate certificate was requested, or including the request for a duplicate and a money order for the necessary amount. The request for a telegraphic certificate should be sent to the office prescribed in paragraph (b) of this section.

(Secs. 3, 6, 9, 80 Stat. 931, 49 U.S.C. 1652, 1655, 1657)

[Amdt. 143-2, 31 FR 13525, Oct. 20, 1966, as amended by Doc. No. 8084, 32 FR 5769, Apr. 11, 1967; Amdt. 143-3, 35 FR 14076, Sept. 4, 1970; Amdt. 143-4, 36 FR 2865, Feb. 11, 1971]

§ 143.9 Eligibility requirements: General.

To be eligible for a certificate under this part, a person must be at least 18 years of age, be of good moral character, and comply with § 143.11.

§ 143.11 Knowledge requirements.

Each applicant for a ground instructor certificate must show his practical and theoretical knowledge of the subject for which he seeks a rating by passing a written test on that subject.

§ 143.15 Tests: General procedures.

(a) Tests prescribed by or under this part are given at times and places, and by persons, designated by the Administrator.

(b) The minimum passing grade for each test is 70 percent.

§ 143.17 Re-testing after failure.

An applicant for a ground instructor rating who fails a test under this part may apply for re-testing—

(a) After 30 days after the date he failed that test; or

(b) Upon presenting a statement from a certificated ground instructor, rated for the subject of the test failed, certifying that he has given the applicant at least five hours additional instruction in that subject and now considers that he can pass the test.

§ 143.18 Written tests: Cheating or other unauthorized conduct.

(a) Except as authorized by the Administrator, no person may—

(1) Copy, or intentionally remove, a written test under this part;

(2) Give to another, or receive from another, any part or copy of that test;

(3) Give help on that test to, or receive help on that test from, any person during the period that test is being given;

(4) Take any part of that test in behalf of another person;

(5) Use any material or aid during the period that test is being given; or

(6) Intentionally cause, assist, or participate in any act prohibited by this paragraph.

(b) No person who commits an act prohibited by paragraph (a) of this section is eligible for any airman or ground instructor certificate or rating under this chapter for a period of 1 year after the date of that act. In addition, the commission of that act is a basis for suspending or revoking any airman or ground instructor certificate or rating held by that person.

[Amdt. 143-1, 30 FR 2197, Feb. 18, 1965]

§ 143.19 Recent experience.

The holder of a ground instructor certificate may not perform the duties of a ground instructor unless, within the 12 months before he intends to perform them—

(a) He has served for at least three months as a ground instructor; or

(b) The Administrator has determined that he meets the standards prescribed in this part for the certificate and rating.

§ 143.20 Applications, certificates, logbooks, reports, and records; falsification, reproduction, or alteration.

(a) No person may make or cause to be made—

(1) Any fraudulent or intentionally false statement on any application for a certificate or rating under this part;

(2) Any fraudulent or intentionally false entry in any logbook, record, or report that is required to be kept, made, or used, to show compliance with any requirement for any certificate or rating under this part;

(3) Any reproduction, for fraudulent purpose, of any certificate or rating under this part; or

(4) Any alteration of any certificate or rating under this part.

(b) The commission by any person of an act prohibited under paragraph (a) of this section is a basis for suspending or revoking any airman or ground instructor certificate or rating held by that person.

[Amdt. 143-1, 30 FR 2197, Feb. 18, 1965]

§ 143.21 Display of certificate.

Each person who holds a ground instructor certificate shall keep it readily available to him while instructing and shall present it for inspection upon the request of the Administrator or an authorized representative of the National Transportation Safety Board, or of any Federal, State, or local law enforcement officer.

(Secs. 3, 6, 9, 80 Stat. 931, 49 U.S.C. 1652, 1655, 1657)

[Amdt. 143-2, 31 FR 13525, Oct. 20, 1966, as amended by Doc. No. 8084, 32 FR 5769, Apr. 11, 1967]

§ 143.23 Change of address.

Within 30 days after any change in his permanent mailing address, the holder of a ground instructor certificate shall notify the Department of Transportation, Federal Aviation Administration, Airman Certification Branch, Post Office Box 25082, Oklahoma City, Okla. 73125, in writing, of his new address.

[Amdt. 143-3, 35 FR 14076, Sept. 4, 1970]

PART 145—REPAIR STATIONS

SFAR-36

Subpart A—General

Sec.

145.1 Applicability.
145.2 Performance of maintenance, preventive maintenance, alterations and required inspections for an air carrier or commercial operator under the continuous airworthiness requirements of Parts 121 and 127, and for airplanes under the inspection program required by Part 125.
145.3 Certificate required.
145.11 Application and issue.
145.13 Certification of foreign repair stations: Special requirements.
145.15 Change or renewal of certificates.
145.17 Duration of certificates.
145.19 Display of certificate.
145.21 Change of location or facilities.
145.23 Inspection.
145.25 Advertising.

Subpart B—Domestic Repair Stations

145.31 Ratings.
145.33 Limited ratings.
145.35 Housing and facility requirements.
145.37 Special housing and facility requirements.
145.39 Personnel requirements.
145.41 Recommendation of persons for certification as repairmen.

Sec.
145.43 Records of supervisory and inspection personnel.
145.45 Inspection systems.
145.47 Equipment and materials: Ratings other than limited ratings.
145.49 Equipment and materials: Limited rating.
145.51 Privileges of certificates.
145.53 Limitations of certificates.
145.55 Maintenance of personnel, facilities equipment, and materials.
145.57 Performance standards.
145.59 Inspection of work performed.
145.61 Performance records and reports.
145.63 Reports of defects or unairworthy conditions.

Subpart C—Foreign Repair Stations

145.71 General requirements.
145.73 Scope of work authorized.
145.75 Personnel.
145.77 General operating rules.
145.79 Records and reports.

Subpart D—Limited Ratings for Manufacturers

145.101 Application and issue.
145.103 Privileges of certificates.
145.105 Performance standards.
APPENDIX A

AUTHORITY: Secs. 313, 314, 601, and 607, 72 Stat. 752; 49 U.S.C. 1354(a), 1355, 1421, and 1427, unless otherwise noted.

SOURCE: Docket No. 1157, 27 FR 6662, July 13, 1962, unless otherwise noted.

EDITORIAL NOTE: For miscellaneous technical amendments in this Part 145, see Amdt. 145-3, 31 FR 3336, Mar. 3, 1966 and Amdt. 145-6, 31 FR 9211, July 6, 1966.

SPECIAL FEDERAL AVIATION REGULATION

SFAR-36

1. *General.* Contrary provisions of §§ 121.379(b), 127.140(b) and 145.51 of the Federal Aviation Regulations notwithstanding, a certificate holder may approve an aircraft, airframe, aircraft engine, propeller, or appliance for return to service after accomplishing a major repair if the data used for the repair was developed by that certificate holder in accordance with an authorization issued under this Special Federal Aviation Regulation.

2. *Application.* The applicant for an authorization to develop and use its own technical data for major repairs must submit an application, in writing and signed by an officer of the applicant, to the FAA District Office for the region in which the applicant is located. The application must contain—

(a) The repair station certificate number held by the repair station applicant, the current ratings covered by the certificate, and a copy of the repair station's operations specifications;

(b) The air carrier, air taxi, or commercial operator operating certificate number held by the air carrier, air taxi or commercial operator applicant, and the products that it may maintain under the certificate;

(c) The names, signatures, and titles of the persons for whom authorization to approve the use of technical data for major repairs is requested; and

(d) A description of the applicant's staff with which compliance with section 3 of this Special Federal Aviation Regulation is to be shown.

3. *Eligibility.* (a) To be eligible for an authorization to develop its own technical data for major repairs, the applicant must—

(1) Hold a current domestic repair station certificate under Part 145, an air carrier certificate under Part 121 or 127, or a commercial operator certificate under Part 121, or be an air taxi operator subject to the requirements of § 135.2;

(2) Have adequate personnel, in the United States, appropriate to the products that it may maintain under its certificate; and

(3) Employ, or have available, a staff of engineering personnel who can determine compliance with the applicable airworthiness requirements of the Federal Aviation Regulations.

(b) At least one member of the staff required by paragraph (a)(3) of this section must have all of the following qualifications:

(1) A thorough working knowledge of the applicable requirements of the Federal Aviation Regulations.

(2) A position, on the applicant's staff, with authority to establish repair programs that ensure that repaired products meet the applicable requirements of the Federal Aviation Regulations.

(3) At least one year of satisfactory experience in direct contact with the FAA while processing engineering work for type certification or major repair projects.

(4) At least eight years of aeronautical engineering experience (which may include the one year required by paragraph (b)(3) of this section).

4. *Procedure Manual.* (a) No person holding an authorization issued under this Special Federal Aviation Regulation may exercise any authority under the authorization unless he obtains FAA approval of and complies with a procedure manual containing—

(1) The procedures for developing and determining the adequacy of technical data for major repairs; and

(2) The names, signatures, and responsibilities of officials and of each staff member required by section 3 of this Special Federal Aviation Regulation, identifying those persons who—

(i) Have authority to make changes in procedures that require a revision to the procedure manual; and

(ii) Are to prepare or determine the adequacy of technical data, or both, plan or conduct tests, and approve the results of tests.

(b) No person holding an authorization issued under this Special Federal Aviation Regulation may continue to perform any authorized function affected by any change in staff necessary to continue to meet the requirements of section 3 of this Special Federal Aviation Regulation, or affected by any change in procedures from those approved under paragraph (a) of this section, unless that change is FAA-approved and entered in the manual. For this purpose, the manual must contain a "log-of-revisions" page with space for the identification of each revised item, page, date, and the signature of the person approving the change for the Administrator.

5. *Duration of Authorization.* Each authorization issued under this Special Federal Aviation Regulation is effective from the date of issuance until January 23, 1969, unless it is surrendered or the Administrator suspends, revokes, or otherwise terminates it at an earlier date.

6. *Maintenance of Eligibility.* Each holder of an authorization issued under this Special Federal Aviation Regulation shall continue to meet the requirements for issue of the authorization or shall notify the Administrator within 48 hours of any change (including a change of personnel) that could affect the ability of the holder to meet those requirements.

7. *Transferability.* An authorization issued under this Special Federal Aviation Regulation is not transferable.

8. *Inspections.* Upon request, each holder of an authorization issued under this Special Federal Aviation Regulation and each applicant for an authorization shall let the Administrator inspect his facilities, products, and records.

9. *Limits of Applicability.* (a) An authorization issued under this Special Federal Aviation Regulation applies only to products—

(1) Covered by the rating of the repair station applicant and its operations specifications; and

(2) Covered by the operating certificate and maintenance manual of the air carrier, air taxi, or commercial operator applicant.

(b) Each holder of an authorization issued under this Special Federal Aviation Regulation must comply with any additional limitations prescribed by the Administrator and made a part of the authorization.

10. *Data Review and Service Experience.*

(a) If the Administrator finds that a product for which repair data was developed under this Special Federal Aviation Regulation does not meet the applicable airworthiness requirements, or that an unsafe feature or characteristic caused by a defective repair exists, the holder of the authorization, upon notification by the Administrator, shall investigate the matter and report to the Administrator the results of the investigation and the action, if any, taken or proposed.

(b) If corrective action by the user of the product is necessary for safety because of any noncompliance or defect specified in paragraph (a) of this section, the holder of the authorization shall submit the information necessary for the issuance of an airworthiness directive under Part 39 of the Federal Aviation Regulations.

11. *Current Records.* (a) Each holder of an authorization issued under this Special Federal Aviation Regulation shall maintain, at its facility, current records containing—

(1) For each product for which it has developed and used major repair data, a technical data file that includes any data and amendments thereto (including drawings, photographs, specifications, instructions, and reports) necessary for the major repair;

(2) A list of products by make, model, manufacturer's serial number and, if applicable, any FAA identification, that have been repaired under the authorization; and

(3) A file of information from all available sources on difficulties of products repaired under the authorization.

(b) The records prescribed in paragraph (a) of this section shall be—

(1) Made available by the holder of the authorization, for examination, upon the Administrator's request; and

(2) In the case of the data file prescribed in paragraph (a)(1) of this section, identified by the holder of the authorization and sent to the Administrator as soon as the holder of the authorization no longer utilizes it.

This Special Federal Aviation Regulation terminates January 23, 1984.

[Doc. No. 17551, 43 FR 3085, Jan. 23, 1978, as amended by SFAR 36-1, 45 FR 5677, Jan. 24, 1980; SFAR 36-2, 46 FR 58652, Dec. 3, 1981; SFAR 36-3, 49 FR 4354, Feb. 3, 1984]

Subpart A—General

§ 145.1 Applicability.

(a) This part prescribes the requirements for issuing repair station certificates and associated ratings to facilities for the maintenance and alteration of airframes, powerplants, propellers, or appliances, and prescribes the general operating rules for the holders of those certificates and ratings.

(b) A certificated repair station located in the United States is called a "domestic repair station". A repair station located outside of the United States is called a "foreign repair station".

(c) A manufacturer of aircraft, aircraft engines, propellers, appliances, or parts thereof, may be issued a Repair Station Certificate with a limited rating under Subpart D of this part. Sections 145.11 through 145.79 do not apply to applicants for, or holders of, certificates issued under Subpart D of this part. Any facility where the holder of a certificate issued under Subpart D of this part exercises his privileges under that certificate may be referred to as a "manufacturer's maintenance facility."

[Doc. No. 1157, 27 FR 6662, July 13, 1962, as amended by Amdt. 145-4, 31 FR 5249, Apr. 1, 1966]

§ 145.2 Performance of maintenance, preventive maintenance, alterations and required inspections for an air carrier or commercial operator under the continuous airworthiness requirements of Parts 121 and 127, and for airplanes under the inspection program required by Part 125.

(a) Each repair station that performs any maintenance, preventive maintenance, alterations, or required inspections for an air carrier or commercial operator having a continuous airworthiness program under Part 121 or Part 127 of this chapter shall comply with Subpart L of Part 121 (except §§ 121.363, 121.369, 121.373, and 121.379) or Subpart I of Part 127 (except §§ 127.131, 127.134, 127.136, and 127.140) of this chapter, as applicable. In addition, such repair station shall perform that work in accordance with the air carrier's or commercial operator's manual.

(b) Each repair station that performs inspections on airplanes governed by Part 125 of this chapter shall do that work in accordance with the inspection program approved for the operator of the airplane.

[Amdt. 145-7, 31 FR 10614, Aug. 9, 1966, as amended by Amdt. 145-17, 45 FR 67235, Oct. 9, 1980]

§ 145.3 Certificate required.

No person may operate as a certificated repair station without, or in violation of, a repair station certificate. In addition, an applicant for a certificate may not advertise as a certificated repair station until the certificate has been issued to him.

§ 145.11 Application and issue.

(a) An application for a repair station certificate and rating, or for an additional rating, is made on a form and in a manner prescribed by the Administrator, and submitted with duplicate copies of—

(1) [Reserved]

(2) Its inspection procedures manual;

(3) A list of the maintenance functions to be performed for it, under contract, buy another agency under § 145.49 or Appendix A; and

(4) In the case of an applicant for a propeller rating (class 2) or any accessory rating (class 1, 2, or 3), a list, by type or make, as applicable, of the propeller or accessory for which he seeks approval.

(b) An applicant who meets the requirements of this part is entitled to a repair station certificate with appropriate ratings prescribing such operations specifications and limitations as are necessary in the interests of safety.

[Doc. No. 1157, 27 FR 6662, July 13, 1962, as amended by Amdt. 145-5, 31 FR 8585, June 21, 1966]

§ 145.13 Certification of foreign repair stations: Special requirements.

Before applying under § 145.11, an applicant for a foreign repair station certificate must notify the FAA office having jurisdiction over the area in which the applicant is located of his intention to so apply and send that office a statement of his reasons for wanting a repair station at his place of business. In addition to the information required by § 145.11, the applicant must furnish two copies of a suitably bound brochure, including a physical description of his facilities (with photographs), a description of his inspection system, and organizational chart, the names and titles of managing and supervisory personnel, and a list of services obtained under contract, if any, with the names of the contractors and the types of services they perform. In addition, the applicant must furnish evidence that the fee prescribed by Appendix A of Part 187 of this chapter has been paid.

[Doc. No. 1157, 27 FR 6662, July 13, 1962, as amended by Amdt. 145-20, 47 FR 35694, Aug. 16, 1982]

§ 145.15 Change or renewal of certificates.

(a) Each of the following requires the certificate holder to apply for a change in a repair station certificate, on a form and in the manner prescribed by the Administrator:

(1) A change in the location or housing and facilities of the station.

(2) A request to revise or amend a rating.

(b) If the holder of a repair station certificate sells or transfers its assets, the new owner must apply for an amended certificate, in the manner prescribed in § 145.11 and, if applicable, § 145.13.

(c) A person requesting renewal of a foreign repair station certificate shall, within 30 days before his current certificate expires, send the request to the FAA office having jurisdiction over the station. If he does not make the request within that period, he must follow the procedure prescribed in § 145.13 for applying for a new certificate, but without copies of the brochure.

[Doc. No. 1157, 27 FR 6662, July 13, 1962, as amended by Amdt. 145-8, 32 FR 15670, Nov. 14, 1967]

§ 145.17 Duration of certificates.

(a) A domestic repair station certificate or rating is effective until it is surrendered, suspended, or revoked.

(b) A foreign repair station certificate or rating expires at the end of 12 months after the date on which it was issued, unless it is sooner surrendered, suspended, or revoked. However, if the station continues to comply with § 145.71 and applies for renewal before expiration of such certificate or rating, its certificate or rating may be renewed for 24 months.

(c) The holder of a certificate that expires or is surrendered, suspended, or revoked, shall return it to the Administrator.

[Doc. No. 1157, 27 FR 6662, July 13, 1962, as amended by Amdt. 145-16, 43 FR 22643, May 25, 1978]

§ 145.19 Display of certificate.

Each holder of a repair station certificate shall display the certificate and ratings at a place in the repair station that is normally accessible to the public and is not obscured. The certificate must be available for inspection by the Administrator.

§ 145.21 Change of location or facilities.

(a) The holder of a repair station certificate may not make any change in its location or in its housing and facilities that are required by § 145.35, unless the change is approved in writing in advance.

(b) The Administrator may prescribe the conditions under which a repair station may operate while it is changing its location or housing facilities.

§ 145.23 Inspection.

Each certificated repair station shall allow the Administrator to inspect it, at any time, to determine its compliance with this part. The inspections cover the adequacy of the repair stations inspection system, records, and its general ability to comply with this part. After such an inspection is made, the repair station is notified, in writing, of any defects found during the inspection.

[Amdt. 145-5, 31 FR 8585, June 21, 1966]

§ 145.25 Advertising.

(a) Whenever the advertising of a certificated repair station indicates that it is certificated, it must clearly state its certificate number.

(b) Paragraph (a) of this section applies to advertising in—

(1) Business letterheads;

(2) Billheads and statements;

(3) Customer estimates and inspection forms;

(4) Hangar or shop signs;

(5) Magazines, periodicals, or trade journals; or

(6) Any form of promotional media.

Subpart B—Domestic Repair Stations

§ 145.31 Ratings.

The following ratings are issued under this subpart:

(a) Airframe ratings:

(1) Class 1: Composite construction of small aircraft.

(2) Class 2: Composite construction of large aircraft.

(3) Class 3: All-metal construction of small aircraft.

(4) Class 4: All-metal construction of large aircraft.

(b) Powerplant ratings:

(1) Class 1: Reciprocating engines of 400 horsepower or less.

(2) Class 2: Reciprocating engines of more than 400 horsepower.

(3) Class 3: Turbine engines.

(c) Propeller ratings:

(1) Class 1: All fixed pitch and ground adjustable propellers of wood, metal, or composite construction.

(2) Class 2: All other propellers, by make.

(d) Radio ratings:

(1) Class 1: Communication equipment: Any radio transmitting equipment or receiving equipment, or both, used in aircraft to send or receive communications in flight, regardless of carrier frequency or type of modulation used; including auxiliary and related aircraft interphone systems, amplifier systems, electrical or electronic inter-crew signaling devices, and similar equipment; but not including equipment used for navigation of the aircraft or as an aid to navigation, equipment for measuring altitude or terrain clearance, other measuring equipment operated on radio or radar principles, or mechanical, electrical, gyroscopic, or electronic instruments that are a part of communications radio equipment.

(2) Class 2: Navigational equipment: Any radio system used in aircraft for en route or approach navigation, except equipment operated on radar or pulsed radio frequency principles, but not including equipment for measuring altitude or terrain clearance or other distance equipment operated on radar or pulsed radio frequency principles.

(3) Class 3: Radar equipment: Any aircraft electronic system operated on radar or pulsed radio frequency principles.

(e) Instrument ratings:

(1) Class 1: Mechanical: Any diaphragm, bourdon tube, aneroid, optical, or mechanically driven centrifugal instrument that is used on aircraft or to operate aircraft, including tachometers, airspeed indicators, pressure gauges drift sights, magnetic compasses, altimeters, or similar mechanical instruments.

(2) Class 2: Electrical: Any self-synchronous and electrical indicating instruments and systems, including remote indicating instruments, cylinder head temperature gauges, or similar electrical instruments.

(3) Class 3: Gyroscopic: Any instrument or system using gyroscopic principles and motivated by air pressure or electrical energy, including automatic pilot control units, turn and bank indicators, directional gyros, and their parts, and flux gate and gyrosyn compasses.

(4) Class 4: Electronic: Any instruments whose operation depends on electron tubes, transistors, or similar devices including capacitance type quantity gauges, system amplifiers, and engine analyzers.

(f) Accessory ratings:

(1) Class 1: Mechanical accessories that depend on friction, hydraulics, mechanical linkage, or pneumatic pressure for operation, including aircraft wheel brakes, mechanically driven pumps, carburetors, aircraft wheel assemblies, shock absorber struts and hydraulic servo units.

(2) Class 2: Electrical accessories that depend on electrical energy for their operation, and generators, including starters, voltage regulators, electric motors, electrically driven fuel pumps magnetos, or similar electrical accessories.

(3) Class 3: electronic accessories that depend on the use of an electron tube transistor, or similar device, including supercharger, temperature, air conditioning controls, or similar electronic controls.

§ 145.33 Limited ratings.

(a) Whenever the Administrator finds it appropriate, he may issue a limited rating to a domestic repair station that maintains or alters only a particular type of airframe, powerplant, propeller, radio, instrument, or accessory, or parts thereof, or performs only specialized maintenance requiring equipment and skills not ordinarily found in regular repair stations. Such a rating may be limited to a specific model aircraft, engine, or constituent part, or to any number of parts made by a particular manufacturer.

(b) Limited ratings are issued for—

(1) Airframes of a particular make and model;

(2) Engines of a particular make and model;

(3) Propellers of a particular make and model;

(4) Instruments of a particular make and model;

(5) Radio equipment of a particular make and model;

(6) Accessories of a particular make and model;

(7) Landing gear components;

(8) Floats, by make;

(9) Nondestructive inspection, testing, and processing;

(10) Emergency equipment;

(11) Rotor blades, by make and model;

(12) Aircraft fabric work; and

(13) Any other purpose for which the Administrator finds the applicant's request is appropriate.

(c) For a limited rating for specialized services, the operations specifications of the station shall contain the specification used in performing that specialized service. The specification may either be a civil or military one that is currently used by industry and approved by the Administrator or one developed by the applicant and approved by the Administrator.

§ 145.35 Housing and facility requirements.

(a) An applicant for a domestic repair station certificate and rating, or for an additional rating, must comply with paragraphs (b) to (h) of this section and provide suitable—

(1) Housing for its necessary equipment and material;

(2) Space for the work for which it seeks a rating;

(3) Facilities for properly storing, segregating, and protecting materials, parts, and supplies; and

(4) Facilities for properly protecting parts and subassemblies during disassembly, cleaning, inspection, repair, alteration, and assembly;

so that work being done is protected from weather elements, dust, and heat; workers are protected so that the work will not be impaired by their physical efficiency; and maintenance operations have efficient and proper facilities.

(b) The applicant must provide suitable shop space where machine tools and equipment are kept and where the largest amount of bench work is done. The shop space need not be partitioned but machines and equipment must be segregated whenever—

(1) Machine or woodwork is done so near an assembly area that chips or material might inadvertently fall into assembled or partially assembled work;

(2) Unpartitioned parts cleaning units are near other operations;

(3) Fabric work is done in an area where there are oils and greases;

(4) Painting or spraying is done in an area so arranged that paint or paint dust can fall on assembled or partially assembled work;

(5) Paint spraying, cleaning, or machining operations are done so near testing operations that the precision of test equipment might be affected; and

(6) In any other case the Administrator determines it is necessary.

(c) The applicant must provide suitable assembly space in an enclosed structure where the largest amount of assembly work is done. The assembly space must be large enough for the largest item to be worked on under the rating he seeks and must meet the requirements of paragraph (a) of this section.

(d) The applicant must provide suitable storage facilities used exclusively for storing standard parts, spare parts, and raw materials, and separated from shop and working space. He must organize the storage facilities so that only acceptable parts and supplies will be issued for any job, and must follow standard good practices for properly protecting stored materials.

(e) The applicant must store and protect parts being assembled or disassembled, or awaiting assembly or disassembly, to eliminate the possibility of damage to them.

(f) The applicant must provide suitable ventilation for his shop, assembly, and storage areas so that the physical efficiency of his workers is not impaired.

(g) The applicant must provide adequate lighting for all work being done so that the quality of the work is not impaired.

(h) The applicant must control the temperature of the shop and assembly area so that the quality of the work is not impaired. Whenever special maintenance operations are being performed, such as fabric work or painting, the temperature and humidity control must be adequate to insure the airworthiness of the article being maintained.

§ 145.37 Special housing and facility requirements.

(a) In addition to the housing and facility requirements in § 145.35, an applicant for a domestic repair station certificate and rating, or for an additional rating, for airframes, powerplants, propellers, instruments, accessories, or radios must meet the requirements of paragraphs (b) to (f) of this section.

(b) An applicant for an airframe rating must provide suitable permanent housing for at least one of the heaviest aircraft within the weight class of the rating he seeks. If the location of the station is such that climatic conditions allow work to be done outside, permanent work docks may be used if they meet the requirements of § 145.35(a).

(c) An applicant for either a powerplant or accessory rating must provide suitable trays, racks, or stands for segregating complete engine or accessory assemblies from each other during assembly and disassembly. He must provide covers to protect parts awaiting assembly or during assembly to prevent dust or other foreign objects from entering into or falling on those parts.

(d) An applicant for a propeller rating must provide suitable stands, racks, or other fixtures for the proper storage of propellers after being worked on.

(e) An applicant for a radio rating must provide suitable storage facilities to assure the protection of parts and units that might deteriorate from dampness or moisture.

(f) An applicant for an instrument rating must provide a reasonably dust free shop if the shop allocated to final assembly is not air conditioned. Shop and assembly areas must be kept clean at all times to reduce the possibility of dust or other foreign objects getting into instrument assemblies.

§ 145.39 Personnel requirements.

(a) An applicant for a domestic repair station certificate and rating, or for an additional rating, must provide adequate personnel who can perform, supervise, and inspect the work for which the station is to be rated. The officials of the station must carefully consider the justifications and abilities of their employees and shall determine the abilities of its uncertificated employees performing maintenance operations on the basis of practical tests or employment records. The repair station is primarily responsible for the satisfactory work of its employees.

(b) The number of repair station employees may vary according to the type and volume of its work. However, the applicant must have enough properly qualified employees to keep up with the volume of work in process, and may not reduce the number of its employees below that necessary to efficiently produce airworthy work.

(c) Each repair station shall determine the abilities of its supervisors and shall provide enough of them for all phases of its activities. However, the Administrator may determine the ability of any supervisor by inspecting his employment and experience records or by a personal test. Each supervisor must have direct supervision over working groups but need not have over-all supervision at management level. Whenever apprentices or students are used in working groups on assemblies or other operations that might be critical to the aircraft, the repair station shall provide at least one supervisor for each 10 apprentices or students, unless the apprentices or students are integrated into groups of experienced workers.

(d) Each person who is directly in charge of the maintenance functions of a repair station must be appropriately certificated as a mechanic or repairman under Part 65 of this chapter and must have had at least 18 months of practical experience in the procedures, practices, inspection methods, materials, tools, machine tools, and equipment generally used in the work for which the station is rated. Experience as an apprentice or student mechanic may not be counted in computing the 18 months of experience. In addition, at least one of the persons so in charge of maintenance functions for a station with an airframe rating must have had experience in the methods and procedures prescribed by the Administrator for returning aircraft to service after 100-hour, annual, and progressive inspections.

(e) Each limited repair station shall have employees with detailed knowledge of the particular maintenance function or technique for which it is rated, based on attending a factory school or long experience with the product or technique involved.

§ 145.41 Recommendation of persons for certification as repairmen.

(a) When a person applies for a domestic repair station certificate and rating(s) or additional rating(s) that require a repairman, that person must—

(1) Recommend at least one person for certification as a repairman;

(2) Certify to the Administrator that the person recommended meets the requirements of § 65.101 of this chapter; and

(3) Certify that the person recommended is able to perform and supervise the assigned work.

(b) Each person recommended per paragraph (a)(1) of this section must be at or above the level of shop foreman or department head or be responsible for supervising the work performed by the repair station. A qualified person so recommended may be certificated as a repairman.

(Secs. 313, 314, and 601 through 610, of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1354, 1355, 1421 through 1430); sec. 6(c), Dept. of Transportation Act (49 U.S.C. 1655(c)))

[Doc. No. 21269, 47 FR 33390, Aug. 2, 1982]

§ 145.43 Records of supervisory and inspection personnel.

(a) Each applicant for a domestic repair station certificate and rating, or for an additional rating, must have, and each certificated domestic repair station shall maintain, a roster of—

(1) Its supervisory personnel, including the names of the officials of the station that are responsible for its management and the names of its technical supervisors, such as foreman and crew chiefs; and

(2) Its inspection personnel, including the names of the chief inspector and those inspectors who make final airworthiness determinations before releasing an article to service.

(b) The station shall also provide a summary of the employment of each person whose name is on the roster. The summary must contain enough information as to each person on the roster to show compliance with the experience requirements of this subpart, including—

(1) His present title (e.g., chief inspector, metal shop foreman, etc.);

(2) His total years of experience in the type of work he is doing;

(3) His past employment record, with names of places and term of employment by month, and year;

(4) The scope of his present employment (e.g., airframe overhaul, airframe final assembly, engine inspection, department, etc.); and

(5) The type and number of the mechanic or repairman certificate that he holds, and the ratings on that certificate.

(c) The station shall change the roster, as necessary, to reflect—

(1) Terminating the employment of any person whose name is on the roster;

(2) Assigning any person to duties that require his name to be carried on the roster; or

(3) Any appreciable change in the duties and scope of assignment of any person whose name is on the roster.

(d) The station shall keep the roster and employment summaries required by this section, subject to inspection by the Administrator upon his request.

(e) A domestic repair station may not use the services of a person directly in charge of maintenance or alteration unless it keeps current records on him as required by this section.

[Doc. No. 1157, 27 FR 6662, June 13, 1962, as amended by Amdt. 145-5, 31 FR 8585, June 21, 1966; Amdt. 145-15, 41 FR 47230, Oct. 28, 1976]

§ 145.45 Inspection systems.

(a) An applicant for a repair station certificate, and rating or for an additional rating, must have an inspection system that will produce satisfactory quality control and conform to paragraphs (b) to (f) of this section.

(b) The applicant's inspection personnel must be thoroughly familiar with all inspection methods, techniques, and equipment used in their specialty to determine the quality or airworthiness of an article being maintained or altered. In addition, they must—

(1) Maintain proficiency in using various inspection aids intended for that purpose;

(2) Have available and understand current specifications involving inspection tolerances, limitations, and procedures established by the manufacturer of the product being inspected and with other forms of inspection information such as FAA airworthiness directives and bulletins; and

(3) In cases where magnetic, fluorescent, or other forms of mechanical inspection devices are to be used, be skilled in operating that equipment and be able to properly interpret defects indicated by it.

(c) The applicant must provide a satisfactory method of inspecting incoming material to insure that, before it is placed in stock for use in an aircraft or part thereof, it is in a good state of preservation and is free from apparent defects or malfunctions.

(d) The applicant must provide a system of preliminary inspection of all articles he maintains to determine the state of preservation or defects. He shall enter the results of each inspection on an appropriate form supplied by it and keep the form with the article until it is released to service.

(e) The applicant must provide a system so that before working on any airframe, powerplant, or part thereof that has been involved in an accident, it will be inspected thoroughly for hidden damage, including the areas next to the obviously damaged parts. He shall enter the results of this inspection on the inspection form required by paragraph (d) of this section.

(f) At the time he applies for a repair station certificate, the applicant must provide a manual containing inspection procedures, and thereafter maintain it in current condition at all times. The manual must explain the internal inspection system of the repair station in a manner easily understood by any employee of the station. It must state in detail the inspection requirements in paragraphs (a) to (e) of this section, and the repair station's inspection system including the continuity of inspection responsibility, samples of inspection forms, and the method of executing them. The manual must refer whenever necessary to the manufacturer's inspection standards for the maintenance of the particular article. The repair station must give a copy of the manual to each of its supervisory and inspection personnel and make it available to its other personnel. The repair station is responsible for seeing that all supervisory and inspection personnel thoroughly understand the manual.

[Doc. No. 1157, 27 FR 6662, June 13, 1962, as amended by Amdt. 145-15, 41 FR 47230, Oct. 28, 1976]

§ 145.47 Equipment and materials: Ratings other than limited ratings.

(a) An applicant for a domestic repair station certificate and rating, or for an additional rating, must have the equipment and materials necessary to efficiently perform the functions appropriate to the ratings he seeks. An applicant for an airframe, propeller, powerplant, radio, instrument, or accessory rating must be equipped to perform the functions listed in Appendix A to this part that are appropriate for the rating he seeks.

(b) The equipment and materials required by this part must be of such type that the work for which they are being used can be done competently and efficiently. The station shall ensure that all inspection and test equipment is tested at regular intervals to ensure correct calibration to a standard derived from the National Bureau of Standards or to a standard provided by the equipment manufacturer. In the case of foreign equipment, the standard of the country of manufacture may be used if approved by the Administrator. The equipment and materials required for the various ratings must be located on the premises, and under the full control of the station, unless they are used for a function that the repair station is authorized to obtain by contract. If it obtains them by contract, the repair station shall determine the airworthiness of the article involved, unless the contractor is an appropriately rated repair station.

(c) The applicant shall choose suitable tools and equipment for the functions named in Appendix A to this part, as appropriate to each of his ratings, using those the manufacturer of the article involved recommends for maintaining or altering that article, or their equivalent.

(Secs. 313, 314, and 601 through 610, of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1354, 1355, 1421 through 1430); sec. 6(c), Dept. of Transportation Act (49 U.S.C. 1655(c)))

[Doc. No. 1157, 27 FR 6662, July 13, 1962, as amended by Amdt. 145-19, 47 FR 33391, Aug. 2, 1982]

§ 145.49 Equipment and materials: Limited rating.

(a) An applicant for a limited rating (other than specialized services) under § 145.33, must have the equipment and materials to perform any job function appropriate to the rating and class specified in § 145.47 for the rating he seeks. However, he need not be equipped for a function that does not apply to the particular make or model article for which he seeks a rating, if he shows that it is not necessary under the recommendations of the manufacturer of the article.

(b) An applicant for a rating for specialized services or techniques under § 145.33 must—

(1) For magnetic and penetrant inspection, have the equipment and materials for wet and dry magnetic inspection techniques, residual and continuous methods, and portable equipment for the inspection of welds both on and off the aircraft;

(2) For emergency equipment maintenance, have the equipment and materials to perform inspections, repairs, and tests of all kinds of inflated equipment, the re-packing, re-marking, resealing, and re-stocking of life rafts, and the weighing, refilling, and testing of carbon dioxide fire extinguishers and oxygen containers;

(3) For rotor blade maintenance, have the equipment, materials, and technical data recommended by the manufacturer; and

(4) For aircraft fabric work, have the equipment and materials to apply protective coatings to structures, machine stitch fabric panels, perform covering, sewing, and rib stitching operations, apply dope and paint using temperature and humidity control equipment, install patches, grommets, tapes, hooks, and similar equipment, and refinish entire aircraft and aircraft parts.

§ 145.51 Privileges of certificates.

A certificated domestic repair station may—

(a) Maintain or alter any airframe, powerplant, propeller, instrument, radio, or accessory, or part thereof, for which it is rated;

(b) Approve for return to service any article for which it is rated after it has been maintained or altered;

(c) In the case of a station with an airframe rating, perform 100-hour, annual or progressive inspections, and return the aircraft to service; and

AVAILABLE

(d) Maintain or alter any article for which it is rated at a place other than the repair station, if—

(1) The function would be performed in the same manner as when performed at the repair station and in accordance with §§ 145.57 to 145.61;

(2) All necessary personnel, equipment, material, and technical data is available at the place where the work is to be done; and

(3) The inspection procedures manual of the station sets forth approved procedures governing work to be performed at a place other than the repair station.

However, a certificated repair station may not approve for return to service any aircraft, airframe, aircraft engine, propeller, or appliance after major repair or major alteration unless the work was done in accordance with technical data approved by the Administrator.

[Doc. No. 1157, 27 FR 6662, July 13, 1962, as amended by Amdt. 145-2, 29 FR 5451, Apr. 23, 1964]

§ 145.53 Limitations of certificates.

A certificated domestic repair station may not maintain or alter any airframe, powerplant, propeller, instrument, radio, or accessory for which it is not rated, and may not maintain or alter any article for which it is rated if it requires special technical data, equipment, or facilities that are not available to it.

§ 145.55 Maintenance of personnel, facilities, equipment, and materials.

Each certificated domestic repair station shall provide personnel, facilities equipment, and materials at least equal in quality and quantity to the standards currently required for the issue of the certificate and rating that it holds.

§ 145.57 Performance standards.

(a) Except as provided in § 145.2, each certificated domestic repair station shall perform its maintenance and alteration operations in accordance with the standards in Part 43 of this chapter. It shall maintain, in current condition, all manufacturers' service manuals, instructions, and service bulletins that relate to the articles that it maintains or alters.

(b) In addition, each certificated domestic repair station with a radio rating shall comply with those sections of Part 43 of this chapter that apply to electric systems, and shall use materials that conform to approved specifications for equipment appropriate to its rating. It shall use test apparatus, shop equipment, performance standards, test methods, alterations, and calibrations that conform to the manufacturers' specifications or instructions, approved specification, and, if not otherwise specified, to accept good practices of the aircraft radio industry.

[Doc. No. 1157, 27 FR 6662, July 13, 1962, as amended by Amdt. 145-5, 31 FR 8585, June 21, 1966; Amdt. 145-7, 31 FR 10614, Aug. 9, 1966]

§ 145.59 Inspection of work performed.

(a) Each certificated domestic repair station shall, before approving an airframe, powerplant, propeller, instrument, radio, or accessory for return to service after maintaining or altering it, have that article inspected by a qualified inspector. After performing a maintenance or alteration operation, the station shall certify on the maintenance or alteration record of the article that it is airworthy with respect to the work performed.

(b) For the purposes of paragraph (a) of this section, the qualified inspector must be a person employed by the station, who has shown by experience as a journeyman that he understands the inspection methods, techniques, and equipment used in determining the air-worthiness of the article concerned. He must also be proficient in using various types of mechanical and visual inspection aids appropriate for the article being inspected.

[Doc. No. 1157, 27 FR 6662, July 13, 1962, as amended by Amdt. 145-16, 43 FR 22643, May 25, 1978]

§ 145.61 Performance records and reports.

Each certificated domestic repair station shall maintain adequate records of all work that it does, naming the certificated mechanic or repairman who performed or supervised the work, and the inspector of that work. The station shall keep each record for at least two years after the work it applies to is done.

§ 145.63 Reports of defects or unairworthy conditions.

(a) Each certificated domestic repair station shall report to the Administrator within 72 hours after it discovers any serious defect in, or other recurring unairworthy condition of, an aircraft, powerplant, or propeller, or any component of any of them. The report shall be made on a form and in a manner prescribed by the Administrator, describing the defect or malfunction completely without withholding any pertinent information.

(b) In any case where the filing of a report under paragraph (a) of this section might prejudice the repair station, it shall refer the matter to the Administrator for a determination as to whether it must be reported. If the defect or malfunction could result in an imminent hazard to flight, the repair station shall use the most expeditious method it can to inform the Administrator.

(c) The holder of a domestic repair station certificate that is also the holder of a part 121, 127, or 135 certificate, a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval (PMA), or a TSO authorization, or that is the licensee of a Type Certificate, need not report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by it, under § 21.3, § 37.17, § 121.703, § 127.313, or § 135.57 of this chapter.

[Doc. No. 1157, 27 FR 6662, July 13, 1962, as amended by Amdt. 145-9, 35 FR 3155, Feb. 19, 1970; Amdt. 145-13, 35 FR 18189, Nov. 28, 1970]

Subpart C—Foreign Repair Stations

§ 145.71 General requirements.

A repair station certificate with appropriate ratings may be issued for a foreign repair station, if the Administrator finds that the station is necessary for maintaining or altering United States registered aircraft outside of the United States. A foreign repair station must meet the requirements for a domestic repair station certificate, except those in §§ 145.39 through 145.43.

[Doc. No. 1157 27 FR 6662, July 13, 1962, as amended by Amdt. 145-15, 41 FR 47230, Oct. 28, 1976]

§ 145.73 Scope of work authorized.

(a) A certificated foreign repair station may, with respect to United States registered aircraft, work only on aircraft that are used in operations conducted wholly or partly outside of the United States. The Administrator may prescribe operating specifications and limitations that he determines are necessary to comply with the airworthiness requirements of this chapter.

(b) A certificated foreign repair station may perform only the specific services and functions within the ratings and classes that are stated in its operating limitations.

§ 145.75 Personnel.

(a) Each applicant for a foreign repair station certificate and rating, or for an additional rating, must provide enough personnel who are able to perform, supervise, and inspect the work for which he seeks a rating, with regard being given to its volume of work.

(b) The supervisors and inspectors of each certificated foreign repair station must understand the regulations in this chapter, FAA airworthiness directives, and the maintenance and service instructions of the manufacturers of the articles to be worked on. However, they do not need airman certificates issued under this chapter and, along with the persons performing the work of the station, are not considered to be airmen within the meaning of section 101(7) of the Federal Aviation Act of 1958 (49 U.S.C. 1301) with respect to work performed in connection with their employment by the foreign repair station.

(c) In cases where the persons engaged in supervision or final inspection are not certificated under this chapter or by the country in which the station is located, their qualifications are determined by the Administrator, based on their ability to meet the requirements of paragraph (a) of this section as shown by oral or practical test or any other method the Administrator elects.

(d) No person may be responsible for the supervision or final inspection of work on an aircraft of United States registry at a foreign repair station unless he can read, write, and understand English.

§ 145.77 General operating rules.

Each certificated foreign repair station shall comply with the operating rules prescribed in Subpart B of this part, except for §§ 145.61 and 145.63, and has the privileges of a domestic repair station as provided in § 145.51.

§ 145.79 Records and reports.

(a) Each certificated foreign repair station shall maintain such records, and make such reports, with respect to United States registered aircraft, as the Administrator finds necessary, including those prescribed in paragraphs (b) and (c) of this section.

(b) Each certificated foreign repair station shall keep a record of the maintenance and alteration it performs on United States registered aircraft, in enough detail to show the make, model, identification number, and serial number of the aircraft involved, and a description of the work. In a case of major repairs or major alterations, or both, it shall report on a form and in a manner prescribed by the Administrator, giving the original copy to the aircraft owner and sending a copy to the Administrator through the FAA office having jurisdiction over the station. However, if a major repair or alteration is made on a United States scheduled flag air carrier aircraft, the report may be made in the log or other record provided by the carrier for that purpose. Upon request, the station shall make all of its maintenance and alteration records available to the Administrator.

(c) Each certificated foreign repair station shall, within 72 hours after it discovers any serious defect in, or other recurring unairworthy condition of, any aircraft, powerplant, propeller, or any component of any of them, that it works on under this part, report that defect or unairworthy condition to the Administrator.

(d) The holder of a foreign repair station certificate that is also the holder of a Type Certificate (including a Supplemental Type Certificate), a Parts Manufacturer Approval (PMA), or a TSO authorization or that is the licensee of a Type Certificate need not report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by it, under § 21.3 of this chapter or § 37.17 of this chapter.

[Doc. No. 1157, 27 FR 6662, July 13, 1962, as amended by Amdt. 145-9, 35 FR 3155, Feb. 19, 1970; Amdt. 145-13, 35 FR 18189, Nov. 28, 1970]

Subpart D—Limited Ratings for Manufacturers

AUTHORITY: Secs. 313(a), 601, 602, 605, and 607, 72 Stat. 752; 49 U.S.C. 1354(a), 1421, 1422, 1425, and 1427, unless otherwise noted.

SOURCE: Docket No. 1221, 31 FR 5249, Apr. 1, 1966, unless otherwise noted.

§ 145.101 Application and issue.

(a) Upon application in a form and manner prescribed by the Administrator, a repair station certificate with a limited rating for a manufacturer may be issued without further showing to—

(1) The holder or licensee of a Type Certificate who has an approved production inspection system;

(2) The holder of a Production Certificate;

(3) Any person who meets the requirements of § 21.303 of this chapter, and has the prescribed Fabrication Inspection System; and

(4) The holder of a Technical Standard Order (TSO) authorization.

(b) Limited ratings are issued under paragraph (a) of this section for—

(1) Aircraft manufactured by the holder of the rating under a Type Certificate or a Production Certificate;

(2) Aircraft engines manufactured by the holder of the rating under a Type Certificate or a Production Certificate;

(3) Propellers manufactured by the holder of the rating under a Type Certificate or a Production Certificate;

(4) Appliances manufactured by the holder of the rating (i) under a Type Certificate, (ii) under a Production Certificate, (iii) under a TSO authorization, or (iv) in accordance with § 21.303 of this chapter; and

(5) Parts manufactured by the holder of the rating under a TSO authorization or in accordance with § 21.303 of this chapter.

§ 145.103 Privileges of certificates.

(a) The holder of a repair station certificate issued under this subpart may maintain and approve for return to service any article for which it is rated, and perform preventive maintenance on that article, if certificated mechanics or repairmen are employed directly in charge of the maintenance and preventive maintenance.

(b) The privileges granted under this section apply to any location or facility unless the certificate limits the holder to specific locations or facilities.

§ 145.105 Performance standards.

Except as provided in § 145.2 each holder of a certificate issued under this subpart shall perform its maintenance and preventive maintenance operations in accordance with Part 43 of this chapter.

[Amdt. 145-7, 31 FR 10614, Aug. 9, 1966]

APPENDIX A

NOTE: When an asterisk (*) is shown after any job function listed in this appendix it indicates that the applicant need not have the equipment and material on his premises for performing this job function provided he contracts that particular type work to an outside agency having such equipment and material.

(a) An applicant for a Class 1, 2, 3, or 4 airframe rating must provide equipment and material necessary for efficiently performing the following job functions:

(1) Steel structural components:

Repair or replace steel tubes and fittings using the proper welding techniques when appropriate.

Anticorrosion treatment of the interior and exterior of steel parts,

Metal plating or anodizing*,

Simple machine operations such as making bushings, bolts, etc.,

Complex machine operations involving the use of planers, shapers, milling machines, etc.*,

Fabricate steel fittings,

Abrasive air blasting and chemical cleaning operations*,

Heat treatment*,

Magnetic inspection*,

Repair or rebuilt metal tanks*.

(2) Wood structure:

Splice wood spars,

Repair ribs and spars (wood),

Fabricate wood spars*,

Repair or replace metal ribs,

Interior alignment of wings,

Repair or replace plywood skin,

Treatment against wood decay.

(3) Alloy skin and structural components:

Repair and replace metal skin, using power tools and equipment,

Repair and replace alloy members and components such as tubes, channels, cowlings, fittings, attach angles, etc.,

Alignment of components using jigs or fixtures as in the case of joining fuselage sections or other similar operations,

Make up wooden forming blocks or dies,

Fluorescent inspection of alloy components*,

Fabricate alloy members and components such as tubes, channels, cowlings, fittings, attach angles, etc.*

(4) Fabric covering:

Repairs to fabric surfaces,

Recovering and refinishing of components and entire aircraft*.

(5) Control systems.

Renewing control cables, using swaging and splicing techniques,

Rigging complete control system,

Renewing or repairing all control system hinge point components such as pins, bushings, etc.,

Install control system units and components.

(6) Landing gear systems:

Renew or repair all landing gear hinge point components and attachments such as bolts, bushings, fittings, etc.,

Overhaul and repair elastic shock absorber units,

Overhaul and repair hydraulic-pneumatic shock absorber units*,

Overhaul and repair brake system components*

Conduct retraction cycle tests,

Overhaul and repair electrical circuits,

Overhaul and repair hydraulic system components*,

Repair or fabricate hydraulic lines.

(7) Electric wiring systems:

Diagnose malfunctions,

Repair or replace wiring,

Installation of electrical equipment,

Bench check electrical components (this check is not to be confused with the more complex functional test after overhaul).

(8) Assembly operations:

Assembly of airframe component parts such as landing gear, wings, controls, etc.,

Rigging and alignment of airframe components, including the complete aircraft and control system,

Installation of powerplants,

Installation of instruments and accessories,

Assembly and fitting of cowling, fairings, etc.,

Repair and assembly of plastic components such as windshields, windows, etc.,

Jack or hoist complete aircraft.

Conduct aircraft weight and balance operations (this function will be conducted in draft-free area)*,

Balance control surfaces.

(b) An applicant for any class of powerplant rating must provide equipment and material necessary for efficiently performing the following job functions appropriate to the class of rating applied for:

(1) Classes 1 and 2. (i) Maintain and alter powerplants, including replacement of parts:

Chemical and mechanical cleaning,

Disassembly operations,

Replacement of valve guides and seats*,

Replacement of bushings, bearings, pins, inserts, etc.,

Plating operations (copper, silver, cadmium, etc.)*,

Heating operations (involving the use of recommended techniques requiring controlled heating facilities),

Chilling or shrinking operations,

Removal and replacement of studs,

Inscribing or affixing identification information,

Painting of powerplants and components,

Anticorrosion treatment for parts,

Replacement and repair of powerplant alloy sheet metal and steel components such as baffles, fittings, etc.*

(ii) Inspect all parts, using appropriate inspection aids:

Magnetic, fluorescent and other acceptable inspection aids*,

Precise determination of clearances and tolerances of all parts,

Inspection for alignment of connecting rods, crankshafts, impeller shafts, etc.,

Balancing of parts, including crankshafts, impellers, etc.*,

Inspection of valve springs.

(iii) Accomplish routine machine work:

Precision grinding, honing and lapping operations (includes crankshaft, cylinder barrels, etc.)*,

Precision drilling, tapping, boring, milling and cutting operations*,

Reaming of inserts, bushings, bearings and other similar components,

Refacing of valves.

(iv) Perform assembly operations:

Valve and ignition timing operations,

Fabricate and test ignition harnesses,

Fabricate and test rigid and flexible fluid lines,

Prepare engines for long- or short-term storage,

Functional check powerplant accessories (this check is not to be confused with the more complex performance test of overhaul)*,

Hoist engines by mechanical means,

Install engines in aircraft*,

Align and adjust engine controls*,

Installation of engines in aircraft and alignment and adjustment of engine controls, when completed, must be inspected by either an appropriately rated certificated mechanic or certificated repairman. Persons supervising or inspecting these functions must thoroughly understand the pertinent installation details involved.

(v) Test overhauled powerplants in compliance with manufacturers' recommendations: The test equipment will be the same as recommended by the manufacturers of the particular engines undergoing test or equivalent equipment that will accomplish the same purpose. The testing function may be performed by the repair station itself, or may be contracted to an outside agency. In either case the repair station will be responsible for the final acceptance of the tested engine.

(2) Class 3. Functional and equipment requirements for turbine engines will be governed entirely by the recommendations of the manufacturer, including techniques, inspection methods, and test.

(c) An applicant for any class of propeller rating must provide equipment and material necessary for efficiently performing the following job functions appropriate to the class of rating applied for:

(1) Class 1. (i) Maintain and alter propellers, including installation and replacement of parts:

Replace blade tipping,

Refinish wood propellers,

Make wood inlays,

Refinish plastic blades,

Straighten bent blades within repairable tolerances,

Modify blade diameter and profile,

Polish and buff,

Painting operations,

Remove from and reinstall on powerplants.

(ii) Inspect components, using appropriate inspection aids:

Inspect propellers for conformity with manufacturer's drawings and specifications,

Inspect hubs and blades for failures and defects, using magnetic or fluorescent inspection devices*, Inspect hubs and blades for failures and defects, using all visual aids, including the etching of parts.

Inspect hubs for wear of splines or keyways or any other defect.

(iii) Repair or replace components: (Not applicable to this class).

(iv) Balance propellers:

Test for proper track on aircraft.

Test for horizontal and vertical unbalance (this test will be accomplished with the use of precision equipment).

(v) Test propeller pitch-changing mechanisms: (Not applicable to this class).

(2) Class 2. (i) Maintain and alter propellers, including installation and the replacement of parts:

All functions listed under paragraph (c)(1)(i) of this appendix when applicable to the make and model propeller for which a rating is sought.

Properly lubricate moving parts.

Assemble complete propeller and subassemblies, using special tools when required.

(ii) Inspect components, using appropriate inspection aids: All functions listed under paragraph (c)(1)(ii) of this appendix when applicable to the make and model propeller for which a rating is sought.

(iii) Repair or replace component parts:

Replace blades, hubs, or any of their components.

Repair or replace anti-icing devices.

Remove nicks or scratches from metal blades.

Repair or replace electrical propeller components.

(iv) Balance propellers: All functions listed under paragraph (c)(1)(iv) of this appendix when applicable to the make and model propeller for which a rating is sought.

(v) Test propeller pitch-changing mechanism:

Test hydraulically, propellers and components.

Test electrically operated propellers and components.

Test of constant speed devices*.

(d) An applicant for a radio rating must provide equipment and materials as follows:

(1) For a Class 1 (Communications) radio rating, the equipment and materials necessary for efficiently performing the job functions listed in paragraph (4) and the following job functions:

The testing and repair of headsets, speakers, and microphones.

The measuring of radio transmitter power output.

(2) For a Class 2 (Navigation) radio rating, the equipment and materials necessary for efficiently performing the job functions listed in paragraph (4) and the following job functions:

The testing and repair of headsets.

The testing of speakers.

The repair of speakers.*

The measuring of loop antenna sensitivity by appropriate methods.

The determination and compensation for quadrantal error in aircraft direction finder radio equipment.

The calibration of any radio navigational equipment, enroute and approach aids, or similar equipment, appropriate to this rating to approved performance standards.

(3) For Class 3 (Radar) radio rating, the equipment and materials necessary for efficiently performing the job functions listed in paragraph (4) and the following job functions:

The measuring of radio transmitter power output.

The metal plating of transmission lines, wave guides, and similar equipment in accordance with appropriate specifications.*

The pressurization of appropriate radar equipment with dry air, nitrogen, or other specified gases.

(4) For all classes of radio ratings, the equipment and materials necessary for efficiently performing the following job functions:

Perform physical inspection of radio systems and components by visual and mechanical methods.

Perform electrical inspection of radio systems and components by means of appropriate electrical and/or electronic test instruments.

Check aircraft wiring, antennas, connectors, relays, and other associated radio components to detect installation faults.

Check engine ignition systems and aircraft accessories to determine sources of electrical interference.

Check aircraft power supplies for adequacy and proper functioning.

Test radio instruments.*

Overhaul, test, and check dynamotors, inverters, and other radio electrical apparatus.*

Paint and refinish equipment containers.*

Accomplish appropriate methods of marking calibrations, or other information on radio control panels and other components, as required.*

Make and reproduce drawings, wiring diagrams, and other similar material required to record alterations and/or modifications to radio (photographs may be used in lieu of drawings when they will serve as an equivalent or better means of recording).*

Fabricate tuning shaft assemblies, brackets, cable assemblies, and other similar components used in radios or aircraft radio installations.*

Align tuned circuits (RF and IF).

Install and repair aircraft antennas.

Install complete radio systems in aircraft and prepare weight and balance reports* (That phase of radio installation requiring alterations to the aircraft structure must be performed, supervised, and inspected by qualified personnel).

Measure modulation values, noise, and distortion in radios.

Measure audio and radio frequencies to appropriate tolerances and perform calibration necessary for the proper operation of radios.

Measure radio component values (inductance, capacitance, resistance, etc.).

Measure radiofrequency transmission line attenuation.

Determine wave forms and phase in radios when applicable.

Determine proper aircraft radio antenna, lead-in and transmission line characteristics and locations for type of radio equipment to which connected.

Determine operational condition of radio equipment installed in aircraft by using appropriate portable test apparatus.

Determine proper location for radio antennas on aircraft.

Test all types of electronic tubes, transistors, or similar devices in equipment appropriate to the rating.

(e) An applicant for any class of instrument rating must provide equipment and material necessary for efficiently performing the following job functions, in accordance with pertinent specifications and manufacturers' recommendations, appropriate to the class of rating applied for:

(1) Class 1. (i) Diagnose instrument malfunctions: Diagnose malfunctioning of the following instruments:

Rate of climb indicators,
Altimeters,
Air speed indicators,
Vacuum indicators,
Oil pressure gauges,
Fuel pressure gauges,
Hydraulic pressure gauges,
Deicing pressure gauges,
Pitot-static tube,
Direct indicating compasses,
Accelerometer,
Direct indicating tachometers,
Direct reading fuel quantity gauges,
Optical (sextants, drift sights, etc.)*.

(ii) Maintain and alter instruments, including installation and replacement of parts:

Perform these functions on instruments listed under paragraph (e)(1)(i) of this appendix.

The function of installation includes fabrication of instrument panels and other installation structural components. The repair station should be equipped to perform this function. However, it may be contracted to a competent outside agency equipped to perform the function.

(iii) Inspect, test and calibrate instruments: Perform these functions on instruments listed under paragraph (e)(1)(i) of this appendix, on and off the aircraft, when appropriate.

(2) Class 2. (i) Diagnose instrument malfunctions: Diagnose malfunctioning of the following instruments:

Tachometers,
Synchroscope,
Electric temperature indicators,
Electric resistance type indicators,
Moving magnet type indicators,
Resistance type fuel indicators,
Warning units (oil-fuel),
Selsyn systems and indicators,
Self-synchronous systems and indicators,
Remote indicating compasses,
Fuel quantity indicators,
Oil quantity indicators,
Radio indicators,
Ammeters,
Voltmeters.

(ii) Maintain and alter instruments, including installation and the replacement of parts:

Perform these functions on instruments listed under paragraph (e)(2)(i) of this appendix.

The function of installation includes fabrication of instrument panels and other installation structural components. The repair station should be equipped to perform this function. However, it may be contracted to a competent outside agency equipped to perform the function.

(iii) Inspect, test and calibrate instruments: Perform these functions on instruments listed under paragraph (e)(2)(i) of this appendix, on and off the aircraft, when appropriate.

(3) Class 3. (i) Diagnose instrument malfunctions: Diagnose malfunctioning of the following instruments:

Turn and bank indicators,
Directional gyros,
Horizon gyros,
Auto pilot control units and components*,
Remote reading direction indicators*.

(ii) Maintain and alter instruments, including installation and replacement of parts:

Perform these functions on instruments listed under paragraph (e)(3)(i) of this appendix.

The function of installation includes fabrication of instrument panels and other installation structural components. The repair station should be equipped to perform this function. However, it may be contracted to a competent outside agency equipped to perform the function.

(iii) Inspect, test and calibrate instruments: Perform these functions on instruments listed under paragraph (e)(3)(i) of this appendix, on and off the aircraft, when appropriate.

(4) Class 4. (i) Diagnose instrument malfunctions: Diagnose malfunctioning of the following instruments:

Capacitance type quantity gauge.

Other electronic instruments.

Engine analyzers.

(ii) Maintain and alter instruments, including installation and replacement of parts:

Perform these functions on instruments listed under paragraph (e)(4)(i) of this appendix.

The function of installation includes fabrication of instrument panels and other installation structural components. The repair station should be equipped to perform this function. However, it may be contracted to a competent outside agency equipped to perform the function.

(iii) Inspect, test and calibrate instruments: Perform these functions on instruments listed under paragraph (e)(4)(i) of this appendix, on and off the aircraft, when appropriate.

(f) An applicant for a Class 1, 2, or 3 accessory rating must provide equipment and material necessary for efficiently performing the following job functions, in accordance with pertinent specifications and the manufacturers' recommendations:

(1) Diagnose accessory malfunctions.

(2) Maintain and alter accessories, including installation and the replacement of the parts.

(3) Inspect, test, and, where necessary, calibrate accessories.

(Secs. 313, 314, and 601 through 610, of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1354, 1355, 1421 through 1430); sec. 6(c), Dept. of Transportation Act (49 U.S.C. 1655(c)))

[Doc. No. 1157, 27 FR 11693, Nov. 28, 1962, as amended by Amdt. 145-14, 35 FR 19349, Dec. 22, 1970; Amdt. 145-19, 47 FR 33391, Aug. 2, 1982]

PART 147—AVIATION MAINTENANCE TECHNICIAN SCHOOLS

Subpart A—General

Sec.
147.1 Applicability.
147.3 Certificate required.
147.5 Application and issue.
147.7 Duration of certificates.

Subpart B—Certification Requirements

147.11 Ratings.
147.13 Facilities, equipment, and material requirements.
147.15 Space requirements.
147.17 Instructional equipment requirements.
Sec.
147.19 Material, tool, and shop equipment requirements.
147.21 General curriculum requirements.
147.23 Instructor requirements.

Subpart C—Operating Rules

147.31 Attendance and enrollment, tests and credit for prior instruction or experience.
147.33 Records.
147.35 Transcripts and graduation certificates.
147.36 Maintenance of instructor requirements.
147.37 Maintenance of facilities, equipment and material.
147.38 Maintenance of curriculum requirements.
147.38a Quality of instruction.
147.39 Display of certificate.
147.41 Change of location.
147.43 Inspection.
147.45 Advertising.

APPENDIX A—CURRICULUM REQUIREMENTS
APPENDIX B—GENERAL CURRICULUM SUBJECTS
APPENDIX C—AIRFRAME CURRICULUM SUBJECTS
APPENDIX D—POWERPLANT CURRICULUM SUBJECTS

AUTHORITY: Secs. 313(a), 314, 601, and 607, 72 Stat. 752; 49 U.S.C. 1354(a), 1355, 1421, and 1427.

SOURCE: Docket No. 1157, 27 FR 6669 July 13, 1962, unless otherwise noted.

Subpart A—General

§ 147.1 Applicability.

This part prescribes the requirements for issuing aviation maintenance technician school certificates and associated ratings and the general operating rules for the holders of those certificates and ratings.

§ 147.3 Certificate required.

No person may operate as a certificated aviation maintenance technician school without, or in violation of, an aviation maintenance technician school certificate issued under this part.

[Doc. No. 15196, 41 FR 47230, Oct. 28, 1976]

§ 147.5 Application and issue.

(a) An application for a certificate and rating, or for an additional rating, under this part is made on a form and in a manner prescribed by the Administrator, and submitted with—

(1) A description of the proposed curriculum;

(2) A list of the facilities and materials to be used (with photographs of the facilities, if possible);

(3) A list of its instructors, including the kind of certificate and ratings held, the certificate number, and the subjects to be taught by each; and

(4) A statement of the maximum number of students it expects to teach at any one time.

(b) An applicant who meets the requirements of this part is entitled to an aviation maintenance technician school certificate and associated ratings prescribing such operations specifications and limitations as are necessary in the interests of safety.

§ 147.7 Duration of certificates.

(a) An aviation maintenance technician school certificate or rating is effective until it is surrendered, suspended, or revoked.

(b) The holder of a certificate that is surrendered, suspended, or revoked, shall return it to the Administrator.

[Doc. No. 1157, 27 FR 6669, July 19, 1962, as amended by Amdt. 147-3, 41 FR 47230, Oct. 28, 1976]

Subpart B—Certification Requirements

§ 147.11 Ratings.

The following ratings are issued under this part:

(a) Airframe.

(b) Powerplant.

(c) Airframe and powerplant.

§ 147.13 Facilities, equipment, and material requirements.

An applicant for an aviation maintenance technician school certificate and rating, or for an additional rating, must have at least the facilities, equipment, and materials specified in §§ 147.15 to 147.19 that are appropriate to the rating he seeks.

§ 147.15 Space requirements.

An applicant for an aviation maintenance technician school certificate and rating, or for an additional rating, must have such of the following properly heated, lighted, and ventilated facilities as are appropriate to the rating he seeks and as the Administrator determines are appropriate for the maximum number of students expected to be taught at any time:

(a) An enclosed classroom, separate from other space and facilities, suitable for teaching theory classes.

(b) Suitable facilities, either central or located in training areas, arranged to assure proper separation from the working space for the segregation and protection of parts, tools, materials, and similar articles.

(c) Suitable separate space for doping and paint spraying.

(d) Suitable separate space equipped with washtank and degreasing equipment with air pressure, or other adequate cleaning equipment.

(e) Suitable facilities for running engines.

(f) Suitable separate space, with adequate equipment, including benches, tables, and instruments, to disassemble, repair, assemble, test, service, and inspect—

(1) Ignition, electrical equipment, and appliances;

(2) Carburetors and fuel systems; and

(3) Hydraulic and vacuum systems for aircraft, aircraft engines, and their appliances.

(g) Suitable space, with adequate equipment including tables, benches, horses, stands, and jacks, for disassembling, inspecting, and rigging aircraft.

(h) Suitable space, with adequate equipment, for disassembling, inspecting, overhauling, assembling, troubleshooting, and timing engines.

[Amdt. 147-2, 35 FR 5533, Apr. 3, 1970]

§ 147.17 Instructional equipment requirements.

(a) An applicant for a mechanic school certificate and rating, or for an additional rating, must have such of the following instructional equipment as is appropriate to the rating he seeks:

(1) Various kinds of airframe structures, airframe systems and components, powerplants, and powerplant

systems and components (including propellers) of a quantity and type suitable to complete the practical projects required by its approved curriculums.

(2) At least one aircraft of a type currently certificated by FAA for private or commercial operation, with powerplant, propeller, instruments, two-way radio, landing lights, and other equipment and accessories on which a mechanic might be required to work and with which he should be familiar.

(b) The equipment required by paragraph (a) of this section need not be in an airworthy condition. However, if it was damaged, it must have been repaired enough for complete assembly.

(c) Airframes, powerplants, propellers, appliances, and components thereof, on which instruction is to be given, and from which practical working experience is to be gained, must be so diversified as to show the different methods of construction, assembly, inspection, and operation when installed in an aircraft for use. There must be enough units so that not more than eight students will work on any one unit at a time.

(d) If the aircraft used for instructional purposes does not have retractable landing gear and wing flaps, the school must provide training aids, or operational mock-ups of them.

[Doc. No. 1157, 27 FR 6669, July 19, 1962]

§ 147.19 Material, tool, and shop equipment requirements.

An applicant for a mechanic school certificate and rating, or for an additional rating, must have an adequate supply of material and tools, and such of the shop equipment, special tools, and other miscellaneous tools and equipment as are appropriate to the approved curriculum of the school and are used in constructing and maintaining aircraft, to assure that each student will be properly instructed. The tools and shop equipment must be in satisfactory working condition and of the proper kind for the purpose for which they are to be used.

§ 147.21 General curriculum requirements.

(a) An applicant for an aviation maintenance technician school certificate and rating, or for an additional rating, must have an approved curriculum that is designed to qualify his students to perform the duties of a mechanic for a particular rating or ratings.

(b) The curriculum must offer at least the following number of hours of instruction for the rating shown:

(1) Airframe—1,150 hours (400 general plus 750 airframe).

(2) Powerplant—1,150 hours (400 general plus 750 powerplant).

(3) Combined airframe and powerplant—1,900 hours (400 general plus 750 airframe and 750 powerplant).

(c) The curriculum must cover the subjects and items prescribed in Appendix B, and in Appendix C or D as applicable. Each item must be taught at the indicated level of proficiency, as defined in Appendix A.

(d) The curriculum must show—

(1) The required practical projects to be completed;

(2) For each subject, the proportions of theory and other instruction to be given; and

(3) A schedule of the required school tests to be given.

(e) The curriculum must be so designed that at least 50 percent of the total curriculum time is spent in shop and laboratory instruction.

[Doc. No. 1157, 27 FR 6669, July 13, 1962 as amended by Amdt. 147-1, 32 FR 5770 Apr. 11, 1967]

§ 147.23 Instructor requirements.

An applicant for an aviation maintenance technican school certificate and rating, or for an additional rating, must provide the number of instructors holding appropriate mechanic certificates and ratings that the Administrator determines necessary to provide adequate instruction and supervision of the students, including at least one such instructor for each 25 students in each shop or laboratory class. However, the applicant may provide specialized instructors, who are not certificated mechanics, to teach only mathematics, physics, drawing, and similar subjects.

[Amdt. 147-2, 35 FR 5534, Apr. 3, 1970]

Subpart C—Operating Rules

§ 147.31 Attendance and enrollment, tests, and credit for prior instruction or experience.

(a) A certificated aviation maintenance technician school may not require any student to attend classes of instruction more than 8 hours in any day or more than 6 days or 40 hours in any 7-day period.

(b) Each school shall give an appropriate test to each student who completes a subject at that school.

(c) A school may not graduate a student unless he has completed all of the appropriate curriculum requirements. However, the school may credit a student with instruction or previous experience as follows:

(1) A school may credit a student with instruction satisfactorily completed at—

(i) An accredited university, college, junior college;

(ii) An accredited vocational, technical, trade or high school;

(iii) A military technical school;

(iv) An aviation maintenance technician school, before or after its certification, other than the crediting school.

(2) A school may determine the amount of credit to be allowed—

(i) By an entrance test equal to one given to the students who complete a comparable required curriculum subject at the crediting school;

(ii) By an evaluation of an authenticated transcript from the student's former school; or

(iii) In the case of an applicant from a military school, only on the basis of an entrance test.

(3) A school may credit a student with previous mechanic experience comparable to required curriculum subjects. It must determine the amount of credit to be allowed by documents verifying that experience, and by giving the student a test equal to the one given to students who complete the comparable required curriculum subject at the school.

(d) A school may not have more students enrolled than the number stated in its application for a certificate, unless it amends its application and has it approved.

(e) A school shall use an approved system for determining final course grades, and for recording and controlling student attendance. The system must show hours of absence allowed, and makeup provisions for classes missed.

[Amdt. 147-2, 35 FR 5534, Apr. 3, 1970, as amended by Amdt. 147-4, 43 FR 22643, May 25, 1978]

§ 147.33 Records.

(a) Each certificated aviation maintenance technician school shall keep a current record of each student enrolled, showing—

(1) His attendance, tests, and grades received on the subjects required by this part;

(2) The instruction credited to him under § 147.31(c), if any; and

(3) The authenticated transcript of his grades from that school.

It shall retain the record for at least two years after the end of the student's enrollment, and shall make each record available for inspection by the Administrator during that period.

(b) Each school shall keep a current progress chart or individual progress record for each of its students, showing the practical projects or laboratory work completed, or to be completed, by the student in each subject.

[Doc. No. 1157, 27 FR 6669, July 13, 1962]

§ 147.35 Transcripts and graduation certificates.

(a) Each certificated aviation maintenance technician school shall give a transcript of his grades to each student who is graduated from that school or who leaves it before being graduated. An official of the school shall authenticate the transcript. The transcript must state the curriculum and courses in which the student was enrolled, whether the student satisfactorily completed that curriculum and the final grades he received.

(b) Each school shall give a graduation certificate or certificate of completion to each student that it graduates. An official of the school shall authenticate the certificate. The certificate must show the date of graduation and the approved curriculum title.

[Doc. No. 1157, 27 FR 6669, July 13, 1962]

§ 147.36 Maintenance of instructor requirements.

Each certificated aviation maintenance technician school shall, after certification or addition of a rating, continue to provide the number of instructors holding appropriate mechanic certificates and ratings that the Administrator determines necessary to provide adequate instruction and supervision of the students, including at least one such instructor for each 25 students in each shop or laboratory class. The school may continue to provide specialized instructors, who are not certificated mechanics, to teach only mathematics, physics, drawing, and similar subjects.

[Amdt. 147-2, 35 FR 5534, Apr. 3, 1970]

§ 147.37 Maintenance of facilities, equipment, and material.

(a) Each certificated aviation maintenance technician school shall provide facilities, equipment, and material equal to the standards currently required for the issue of the certificate and rating that it holds.

(b) A school may not make a substantial change in facilities, equipment, or material that have been approved for a particular curriculum, unless that change is approved in advance.

§ 147.38 Maintenance of curriculum requirements.

(a) Each certificated aviation maintenance technician school shall adhere to its approved curriculum.

(b` A school may not change its approved curriculum unless the change is approved in advance.

[Amdt. 147-2, 35 FR 5534, Apr. 3, 1970]

§ 147.38a Quality of instruction.

Each certificated aviation maintenance technician school shall provide instruction of such quality that, of its graduates of a curriculum for each rating who apply for a mechanic certificate or additional rating within 60 days after they are graduated, the percentage of those passing the applicable FAA written tests on their first attempt during any period of 24 calendar months is at least the percentage figured as follows:

(a) For a school graduating fewer than 51 students during that period—the national passing norm minus the number 20.

(b) For a school graduating at least 51, but fewer than 201, students during that period—the national passing norm minus the number 15.

(c) For a school graduating more than 200 students during that period—the national passing norm minus the number 10.

As used in this section, "national passing norm" is the number representing the percentage of all graduates (of a curriculum for a particular rating) of all certificated aviation maintenance technician schools who apply for a mechanic certificate or additional rating within 60 days after they are graduated and pass the applicable FAA written tests on their first attempt during the period of 24 calendar months described in this section.

[Amdt. 147-2, 35 FR 5534, Apr. 3, 1970, as amended by Amdt. 147-3, 41 FR 47230, Oct. 26, 1976]

§ 147.39 Display of certificate.

Each holder of an aviation maintenance technician school certificate and ratings shall display them at a place in the school that is normally accessible to the public and is not obscured. The certificate must be available for inspection by the Administrator.

§ 147.41 Change of location.

The holder of an aviation maintenance technician school certificate may not make any change in the school's location unless the change is approved in advance. If the holder desires to change the location he shall notify the Administrator, in writing, at least 30 days before the date the change is contemplated. If he changes its location without approval, the certificate is revoked.

§ 147.43 Inspection.

The Administrator may, at any time, inspect an aviation maintenance technician school to determine its compliance with this part. Such an inspection is normally made once each six months to determine if the school continues to meet the requirements under which it was originally certificated. After such an inspection is made, the school is notified, in writing, of any deficiencies found during the inspection. Other informal inspections may be made from time to time.

§ 147.45 Advertising.

(a) A certificated aviation maintenance technician school may not make any statement relating to itself that is false or is designed to mislead any person considering enrollment therein.

(b) Whenever an aviation maintenance technician school indicates in advertising that it is a certificated school, it shall clearly distinguish between its approved courses and those that are not approved.

APPENDIX A—CURRICULUM REQUIREMENTS

This appendix defines terms used in Appendices B, C, and D of this part, and describes the levels of proficiency at which items under each subject in each curriculum must be taught, as outlined in Appendices B, C, and D.

(a) *Definitions.* As used in Appendices B, C, and D:

(1) "Inspect" means to examine by sight and touch.

(2) "Check" means to verify proper operation.

(3) "Troubleshoot" means to analyze and identify malfunctions.

(4) "Service" means to perform functions that assure continued operation.

(5) "Repair" means to correct a defective condition. Repair of an airframe or powerplant system includes component replacement and adjustment, but not component repair.

(6) "Overhaul" means to disassemble, inspect, repair as necessary, and check.

(b) *Teaching levels.*

(1) Level 1 requires:

(i) Knowledge of general principles, but no practical application.

(ii) No development of manipulative skill.

(iii) Instruction by lecture, demonstration, and discussion.

(2) Level 2 requires:

(i) Knowledge of general principles, and limited practical application.

(ii) Development of sufficient manipulative skill to perform basic operations.

(iii) Instruction by lecture, demonstration, discussion, and limited practical application.

(3) Level 3 requires:

(i) Knowledge of general principles, and performance of a high degree of practical application.

(ii) Development of sufficient manipulative skill to accomplish return to service.

(iii) Instruction by lecture, demonstration, discussion, and a high degree of practical application.

[Amdt. 147-2, 35 FR 5534, Apr. 3, 1970]

APPENDIX B—GENERAL CURRICULUM SUBJECTS

This appendix lists the subjects required in at least 400 hours in general curriculum subjects.

The number in parentheses before each item listed under each subject heading indicates the level of proficiency at which that item must be taught.

Teaching level	
	A. BASIC ELECTRICITY
(1)	1. Measure capacitance and inductance.
(2)	2. Calculate and measure electrical power.
(3)	3. Measure voltage, current, resistance, continuity, and leakage.
(3)	4. Determine the relationship of voltage, current, and resistance in electrical circuits.
(3)	5. Read and interpret electrical circuit diagrams.
(3)	6. Inspect and service batteries.
	B. AIRCRAFT DRAWINGS
(2)	7. Use drawings, symbols, and schematic diagrams.
(3)	8. Draw sketches of repairs and alterations.
(3)	9. Use blueprint information.
(3)	10. Use graphs and charts.
	C. WEIGHT AND BALANCE
(2)	11. Weigh aircraft.
(3)	12. Perform complete weight-and-balance check and record data.
	D. FLUID LINES AND FITTINGS
(3)	13. Fabricate and install rigid and flexible fluid lines and fittings.
	E. MATERIALS AND PROCESSES
(1)	14. Identify and select appropriate nondestructive testing methods.
(2)	15. Perform penetrant, chemical etching, and magnetic particle inspections.
(2)	16. Perform basic heat-treating processes.
(3)	17. Identify and select aircraft hardware and materials.
(3)	18. Inspect and check welds.
(3)	19. Perform precision measurements.
	F. GROUND OPERATION AND SERVICING
(2)	20. Start, ground operate, move service, and secure aircraft.
(2)	21. Identify and select fuels.
	G. CLEANING AND CORROSION CONTROL
(3)	22. Identify and select cleaning materials.
(3)	23. Perform aircraft cleaning and corrosion control.

Teaching level

H. MATHEMATICS

(1) 24. Extract roots and raise numbers to a given power.
(2) 25. Determine areas and volumes of various geometrical shapes.
(3) 26. Solve ratio, proportion, and percentage problems.
(3) 27. Perform algebraic operations involving addition, subtraction, multiplication, and division of positive and negative numbers.

I. MAINTENANCE FORMS AND RECORDS

(3) 28. Write descriptions of aircraft condition and work performed.
(3) 29. Complete required maintenance forms, records, and inspection reports.

J. BASIC PHYSICS

(2) 30. Use the principles of simple machines; sound, fluid, and heat dynamics.

K. MAINTENANCE PUBLICATIONS

(3) 31. Select and use FAA and manufacturer's aircraft maintenance specifications, data sheets, manuals, and publications, and related Federal Aviation Regulations.
(3) 32. Read technical data.

L. MECHANIC PRIVILEGES AND LIMITATIONS

(3) 33. Exercise mechanic privileges within the limitations prescribed by Part 65 of this chapter.

[Amdt. 147-2, 35 FR 5534, Apr. 3, 1970]

APPENDIX C—AIRFRAME CURRICULUM SUBJECTS

This appendix lists the subjects required in at least 750 hours of each airframe curriculum, in addition to at least 400 hours in general curriculum subjects.

The number in parentheses before each item listed under each subject heading indicates the level of proficiency at which that item must be taught.

I. AIRFRAME STRUCTURES

Teaching level

A. WOOD STRUCTURES

(1) 1. Service and repair wood structures.
(2) 2. Identify wood defects.
(2) 3. Inspect wood structures.

B. AIRCRAFT COVERING

(1) 4. Select and apply fabric and fiberglass covering materials.
(3) 5. Inspect, test, and repair fabric and fiberglass.

C. AIRCRAFT FINISHES

(1) 6. Apply trim, letters, and touchup paint.
(2) 7. Identify and select aircraft finishing materials.
(2) 8. Apply paint and dope.
(2) 9. Inspect finishes and identify defects.

I. AIRFRAME STRUCTURES—Continued

Teaching level

D. SHEET METAL STRUCTURES

(2) 10. Install special rivets and fasteners.
(2) 11. Inspect bonded structures.
(2) 12. Inspect and repair plastics, honeycomb, and laminated structures.
(2) 13. Inspect, check, service, and repair windows, doors, and interior furnishings.
(3) 14. Inspect and repair sheet-metal structures.
(3) 15. Install conventional rivets.
(3) 16. Hand form, lay out, and bend sheet metal.

E. WELDING

(1) 17. Weld magnesium and titanium.
(1) 18. Solder stainless steel.
(1) 19. Fabricate tubular structures.
(2) 20. Solder, braze, gas-weld, and arc-weld steel.
(2) 21. Weld aluminum and stainless steel.

F. ASSEMBLY AND RIGGING

(1) 22. Rig rotary-wing aircraft.
(2) 23. Rig fixed-wing aircraft.
(2) 24. Check alignment of structures.
(3) 25. Assemble aircraft.
(3) 26. Balance and rig movable surfaces.
(3) 27. Jack aircraft.

G. AIRFRAME INSPECTION

(3) 28. Perform airframe conformity and airworthiness inspections.

II. AIRFRAME SYSTEMS AND COMPONENTS

Teaching level

A. AIRCRAFT LANDING GEAR SYSTEMS

(3) 29. Inspect, check, service, and repair landing gear, retraction systems, shock struts, brakes, wheels, tires, and steering systems.

B. HYDRAULIC AND PNEUMATIC POWER SYSTEMS

(2) 30. Repair hydraulic and pneumatic power systems components.
(3) 31. Identify and select hydraulic fluids.
(3) 32. Inspect, check, service, troubleshoot, and repair hydraulic and pneumatic power systems.

C. CABIN ATMOSPHERE CONTROL SYSTEMS

(1) 33. Repair heating, cooling, airconditioning, pressurization, and oxygen system components.
(1) 34. Inspect, check, troubleshoot, service, and repair heating, cooling, air-conditioning, and pressurization systems.
(2) 35. Inspect, check, troubleshoot, service and repair oxygen systems.

D. AIRCRAFT INSTRUMENT SYSTEMS

(1) 36. Inspect, check, service, troubleshoot and repair heading, speed, altitude, time, attitude, temperature, pressure and position indicating systems.
(2) 37. Install instruments.

E. COMMUNICATION AND NAVIGATION SYSTEMS

(1) 38. Inspect, check, and service auto-pilot and approach control systems.
(1) 39. Inspect, check, and service aircraft electronic communication and navigation systems.

II. AIRFRAME SYSTEMS AND COMPONENTS—Continued

Teaching level

(2) 40. Inspect and repair antenna and electronic equipment installations.

F. AIRCRAFT FUEL SYSTEMS

(1) 41. Check and service fuel dump systems.
(1) 42. Perform fuel management transfer, and defueling.
(1) 43. Inspect, check, and repair pressure fueling systems.
(2) 44. Repair aircraft fuel system components.
(2) 45. Inspect and repair fluid quantity indicating systems.
(2) 46. Troubleshoot, service, and repair fluid pressure and temperature warning systems.
(3) 47. Inspect, check, service, troubleshoot, and repair aircraft fuel systems.

G. AIRCRAFT ELECTRICAL SYSTEMS

(2) 48. Repair aircraft electrical system components.
(3) 49. Install, check, and service airframe electrical wiring, controls, switches, indicators, and protective devices.
(3) 50. Inspect, check, troubleshoot, service, and repair alternating current and direct current electrical systems.

H. POSITION AND WARNING SYSTEMS

(1) 51. Inspect, check, and service speed- and takeoff-warning systems, electrical brake controls, and antiskid systems.
(3) 52. Inspect, check, troubleshoot, service, and repair landing gear position indicating and warning systems.

I. ICE AND RAIN CONTROL SYSTEMS

(2) 53. Inspect, check, troubleshoot, service, and repair airframe ice and rain control systems.

J. FIRE PROTECTION SYSTEMS

(1) 54. Inspect, check, and service smoke and carbon monoxide detection systems.
(3) 55. Inspect, check, service, troubleshoot, and repair aircraft fire detection and extinguishing systems.

[Amdt. 147-2, 35 FR 5535, Apr. 3, 1970]

APPENDIX D—POWERPLANT CURRICULUM SUBJECTS

This appendix lists the subjects required in at least 750 hours of each powerplant curriculum, in addition to at least 400 hours in general curriculum subjects.

The number in parentheses before each item listed under each subject heading indicates the level of proficiency at which that item must be taught.

I. POWERPLANT THEORY AND MAINTENANCE

Teaching level

A. RECIPROCATING ENGINES

(1) 1. Inspect and repair 14-cylinder or larger radial engine.
(2) 2. Overhaul reciprocating engine.
(3) 3. Inspect, check, service, and repair opposed and radial engines and reciprocating engine installations.
(3) 4. Install, troubleshoot, and remove reciprocating engines.

B. TURBINE ENGINES

(2) 5. Overhaul turbine engine.
(2) 6. Inspect, check, service, and repair turbine engines and turbine engine installations.
(2) 7. Install, troubleshoot, and remove turbine engines.

C. ENGINE INSPECTION

(3) 8. Perform powerplant conformity and air worthiness inspections.

II. POWERPLANT SYSTEMS AND COMPONENTS

Teaching level

A. ENGINE INSTRUMENT SYSTEMS

(2) 9. Troubleshoot, service, and repair fluid rate-of-flow indicating systems.
(3) 10. Inspect, check, service, troubleshoot, and repair engine temperature, pressure, and r.p.m. indicating systems.

B. ENGINE FIRE PROTECTION SYSTEMS

(3) 11. Inspect, check, service, troubleshoot, and repair engine fire detection and extinguishing systems.

C. ENGINE ELECTRICAL SYSTEMS

(2) 12. Repair engine electrical system components.
(3) 13. Install, check, and service engine electrical wiring, controls, switches, indicators, and protective devices.

D. LUBRICATION SYSTEMS

(2) 14. Identify and select lubricants.
(2) 15. Repair engine lubrication system components.
(3) 16. Inspect, check, service, troubleshoot, and repair engine lubrication systems.

E. IGNITION SYSTEMS

(2) 17. Overhaul magneto and ignition harness.
(2) 18. Repair engine ignition system components.
(3) 19. Inspect, check, service, troubleshoot, and repair reciprocating and turbine engine ignition systems.

F. FUEL METERING SYSTEMS

(1) 20. Inspect, check, and service water injection systems.
(2) 21. Overhaul carburetor.
(2) 22. Repair engine fuel metering system components.
(3) 23. Inspect, check, service, troubleshoot, and repair reciprocating and turbine engine fuel metering systems.

II. POWERPLANT SYSTEMS AND COMPONENTS—Continued

Teaching level	
	G. ENGINE FUEL SYSTEMS
(2)	24. Repair engine fuel system components.
(3)	25. Inspect, check, service, troubleshoot, and repair engine fuel systems.
	H. INDUCTION SYSTEMS
(2)	26. Inspect, check, troubleshoot, service, and repair engine ice and rain control systems.
(2)	27. Inspect, check, service and repair heat exchangers and superchargers.
(3)	28. Inspect, check, service, and repair carburetor air intake and induction manifolds.
	I. ENGINE COOLING SYSTEMS
(2)	29. Repair engine cooling system components.
(3)	30. Inspect, check, troubleshoot, service, and repair engine cooling systems.
	J. ENGINE EXHAUST SYSTEMS
(2)	31. Repair engine exhaust system components.
(3)	32. Inspect, check, troubleshoot, service, and repair engine exhaust systems.
	K. PROPELLERS
(1)	33. Inspect, check, service, and repair propeller synchronizing and ice control systems.
(2)	34. Identify and select propeller lubricants.
(2)	35. Balance propellers.
(2)	36. Repair propeller control system components.
(3)	37. Inspect, check, service, and repair fixed-pitch, constant-speed, and feathering propellers, and propeller governing systems.
(3)	38. Install, troubleshoot, and remove propellers.

(Sec. 6(c), Dept. of Transportation Act; 49 U.S.C. 1655(c))

[Amdt. 147-2, 35 FR 5535, Apr. 3, 1970]

PART 149—PARACHUTE LOFTS

Sec.

149.1 Applicability.
149.3 Application and issue.
149.5 Duration of certificate.
149.7 Cooperation during inspection or test.
149.9 Persons authorized to maintain or alter parachutes.
149.11 Ratings.
149.13 Eligibility requirements: General.
149.15 Reports and records.
149.17 Maintenance of personnel, facilities equipment, and material.
149.19 Maintenance and alteration standards.
149.21 Material standards.
149.23 Drop testing.
149.25 Display of certificate.
149.27 Change of location.

AUTHORITY: Secs. 313(a), 314, 601, and 607, 72 Stat. 752; 49 U.S.C. 1354(a), 1355, 1421, and 1427.

SOURCE: Docket No. 1157, 27 FR 6671, July 13, 1962, unless otherwise noted.

EDITORIAL NOTE: For miscellaneous amendments to cross references in this part, see Amdt. 149-1, 31 FR 9211, July 6, 1966.

§ 149.1 Applicability.

This part prescribes the requirements for issuing parachute loft certificates and associated ratings and the general operating rules for the holders of those certificates and ratings.

§ 149.3 Application and issue.

(a) An application for a certificate and rating, or for an additional rating, under this part is made on a form and in a manner prescribed by the Administrator.

(b) An applicant who meets the requirements of this part is entitled to a parachute loft certificate and appropriate ratings.

(c) The holder of a parachute loft certificate that has been revoked may not apply for a certificate and rating under this part for one year after it is revoked, unless the order of revocation provides otherwise.

§ 149.5 Duration of certificate.

(a) A parachute loft certificate is effective until it is surrendered, suspended, or revoked. However, the Administrator may cancel such a certificate at any time within 60 days after the date it is issued.

(b) The holder of a parachute loft certificate that is surrendered, suspended, or revoked, shall upon the Administrator's request, return it to the Administrator.

§ 149.7 Cooperation during inspection or test.

Upon the Administrator's request, each applicant for a parachute loft certificate must, and each holder of such a certificate shall, cooperate fully during any inspection or test of him, or his personnel, facilities, equipment, and records, by the Administrator.

§ 149.9 Persons authorized to maintain or alter parachutes.

(a) Only the following persons may maintain or alter a parachute:

(1) Any person as authorized by Part 65 of this chapter.

(2) A certificated parachute loft with an appropriate rating.

(3) The manufacturer.

(4) Any other manufacturer that the Administrator considers to be competent.

(b) Each person who maintains or alters a parachute (except the main parachute of a dual parachute pack used for intentional jumping) must perform that maintenance or make that alteration in accordance with approved manuals and specifications.

§ 149.11 Ratings.

(a) The following ratings are issued under this part:

(1) Packing and general maintenance (not including major repair, inspection or overhaul).

(2) Canopy overhaul.

(3) Harness overhaul.

(4) Metal parts and container overhaul.

(5) Drop testing.

(b) A parachute loft rating record is attached to each certificate issued under this part. It contains the names of the ratings issued to the holder of the certificate.

§ 149.13 Eligibility requirements: general.

To be eligible for a parachute loft certificate and associated ratings, or for an additional rating, an applicant must—

(a) Have personnel who are certificated and appropriately rated under Part 65 of this chapter and who are qualified to perform or supervise the kind of work for which the applicant seeks a rating; and

(b) Have the facilities, equipment, and material necessary to do efficiently the kind of work for which he seeks a rating, including suitable housing that is adequately heated, lighted, and ventilated, an adequate inspection system, adequate drawing equipment, and adequate facilities for segregating and storing parts and materials.

§ 149.15 Reports and records.

(a) Each holder of a parachute loft certificate shall make an adequate record of all work done by him, including the names of the persons doing the work. He shall keep each record made for at least two years after the work is done.

(b) Each holder of a parachute loft certificate shall report, on a form prescribed by the Administrator, any recurring or serious defect, or other unairworthy conditions, that he finds in a parachute or a part thereof.

§ 149.17 Maintenance of personnel, facilities, equipment, and material.

Each holder of a parachute loft certificate shall maintain personnel, facilities, equipment, and material at least equal to that currently required by § 149.13 for the issue of the certificate and ratings he holds.

§ 149.19 Maintenance and alteration standards.

Each holder of a parachute loft certificate shall perform maintenance and alteration operations in a workmanlike manner so as to maintain the article worked on in, or restore it to, an airworthy condition.

§ 149.21 Material standards.

Each holder of a parachute loft certificate shall use materials of proper strength and quality for the maintenance or alteration operation being performed.

§ 149.23 Drop testing.

(a) Only the following may drop test a parachute:

(1) The manufacturer.

(2) Any other manufacturer that the Administrator considers to be competent.

(3) A certificated parachute loft with a drop testing rating.

(b) Each holder of a parachute loft certificate shall drop test each parachute on which he has performed a major repair or alteration on a canopy, harness, container, accessory, or any combination of them, whenever the certificated master parachute rigger who inspected it considers that the repair or alteration may have affected the structural, functional, or other airworthiness characteristic of the article.

(c) Whenever it is necessary to determine the functional characteristics of an entire parachute assembly, the loft shall drop test it with a 150 pound dummy man (not including the weight of the parachute) at an indicated airspeed of 70 miles an hour and an altitude of at least 500 feet above the ground.

(d) Whenever it is necessary to determine the material strength values in an entire parachute assembly, or the material airworthiness of the entire assembly before maintenance, the loft shall drop test it with a 190 pound dummy man (not including the weight of the parachute) at an indicated airspeed of 120 miles an hour and an altitude of at least 500 feet above the ground.

§ 149.25 Display of certificate.

Each holder of a parachute loft certificate and ratings shall display them in a prominent place in the parachute loft.

§ 149.27 Change of location.

The holder of a parachute loft certificate may not make any change in the loft's location unless the change is approved, in writing, in advance. If the holder desires to change the location he shall mail the request to the Assistant Administrator of the region in which the loft is located.

SUBCHAPTER I—AIRPORTS

PART 150—AIRPORT NOISE COMPATIBILITY PLANNING

Subpart A—General Provisions

Sec.
150.1 Scope and purpose.
150.3 Applicability.
150.5 Limitations of this part.
150.7 Definitions.
150.9 Designation of noise systems.
150.11 Identification of land uses.
150.13 Incorporations by reference.

Subpart B—Development of Noise Exposure Maps and Noise Compatibility Programs

150.21 Noise exposure maps and related descriptions.
150.23 Noise compatibility programs.

Subpart C—Evaluations and Determinations of Effects of Noise Compatibility Programs

150.31 Preliminary review; acknowledgments.
150.33 Evaluation of programs.
150.35 Determinations; publications; effectivity.
APPENDIX A—NOISE EXPOSURE MAPS
APPENDIX B—NOISE COMPATIBILITY PROGRAMS

AUTHORITY: Secs. 301(a), 307, 313(a), 601, and 611, Federal Aviation Act of 1958, as amended (49 U.S.C. 1341(a), 1348, 1354(a), 1421, and 1431) (49 U.S.C. 106(g)) (Revised, Pub. L. 97-449, Jan. 12, 1983); secs. 101, 102, 103(a), and 104 (a) and (b), Aviation Safety and Noise Abatement Act of 1979, as amended (49 U.S.C. 2101, 2102, 2103(a), and 2104 (a) and (b)); 49 CFR 1.47(m); and Airport and Airway Improvement Act of 1982 (49 U.S.C. 2201 et seq.).

SOURCE: Docket No. 18691, 49 FR 49269, Dec. 18, 1984, unless otherwise noted.

Subpart A—General Provisions

§ 150.1 Scope and purpose.

This part prescribes the procedures, standards, and methodology governing the development, submission, and review of airport noise exposure maps and airport noise compatibility programs, including the process for evaluating and approving or disapproving those programs. It prescribes single systems for— (a) measuring noise at airports and surrounding areas that generally provides a highly reliable relationship between projected noise exposure and surveyed reaction of people to noise; and (b) determining exposure of individuals to noise that results from the operations of an airport. This part also identifies those land uses which are normally compatible with various levels of exposure to noise by individuals. It provides technical assistance to airport operators, in conjunction with other local, State, and Federal authorities, to prepare and execute appropriate noise compatibility planning and implementation programs.

§ 150.3 Applicability.

This part applies to the airport noise compatibility planning activities of the operators of "public use airports," not used exclusively by helicopters, as that term is used in section 101(1) of the ASNA Act as amended (49 U.S.C. 2101) and as defined in section 503(17) of the Airport and Airway Improvement Act of 1982 (49 U.S.C. 2202).

§ 150.5 Limitations of this part.

(a) Pursuant to the ASNA Act (49 U.S.C. 2101 et seq.), this part provides for airport noise compatibility planning and land use programs necessary to the purposes of those provisions. No submittal of a map, or approval or disapproval, in whole or part, of any map or program submitted under this part is a determination concerning the acceptability or unacceptability of that land use under Federal, State, or local law.

(b) Approval of a noise compatibility program under this part is neither a commitment by the FAA to financially assist in the implementation of the program, nor a determination that all measures covered by the program are eligible for grant-in-aid funding from the FAA.

(c) Approval of a noise compatibility program under this part does not by itself constitute an FAA implementing action. A request for Federal action or approval to implement specific noise compatibility measures may be required, and an FAA decision on the request may require an environmental assessment of the proposed action, pursuant to the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*) and applicable regulations, directives, and guidelines.

(d) Acceptance of a noise exposure map does not constitute an FAA determination that any specific parcel of land lies within a particular noise contour. Responsibility for interpretation of the effects of noise contours upon subjacent land uses, including the relationship between noise contours and specific properties, rests with the sponsor or with other state or local government.

§ 150.7 Definitions.

As used in this part, unless the context requires otherwise, the following terms have the following meanings.

"Airport" means any public use airport, not exclusively used by helicopters, as defined by the ASNA Act, including: (a) Any airport which is used or to be used for public purposes, under the control of a public agency, the landing area of which is publicly owned; (b) any privately owned reliever airport; and (c) any privately owned airport which is determined by the Secretary to enplane annually 2,500 or more passengers and receive scheduled passenger service of aircraft, which is used or to be used for public purposes.

"Airport noise compatibility program" and "program" mean that program, and all revisions thereto, reflected in documents (and revised documents) developed in accordance with Appendix B of this part, including the measures proposed or taken by the airport operator to reduce existing noncompatible land uses and to prevent the introduction of additional noncompatible land uses within the area.

"Airport Operator" means, the operator of an airport as defined in the ASNA Act.

"ASNA Act" means the Aviation Safety and Noise Abatement Act of 1979, as amended (49 U.S.C. 2101 et seq.).

"Average sound level" means the level, in decibels, of the mean-square, A-weighted sound pressure during a specified period, with reference to the square of the standard reference sound pressure of 20 micropascals.

"Compatible land use" means the use of land that is identified under this part as normally compatible with the outdoor noise environment (or an adequately attenuated noise level reduction for any indoor activities involved) at the location because the yearly day-night average sound level is at or below that identified for that or similar use under Appendix A (Table 1) of this part.

"Day-night average sound level" (DNL) means the 24-hour average sound level, in decibels, for the period from midnight to midnight, obtained after the addition of ten decibels to sound levels for the periods between midnight and 7 a.m., and between 10 p.m., and midnight, local time." The symbol for DNL is L_{dn}.

"Noise exposure map" means a scaled, geographic depiction of an airport, its noise contours, and surrounding area developed in accordance with section A150.101 of Appendix A of this part, including the accompanying documentation setting forth the required descriptions of forecast aircraft operations at that airport during the fifth calendar year beginning after submission of the map, together with the ways, if any, those operations will affect the map (including noise contours and the forecast land uses).

"Noise level reduction" (NLR) means the amount of noise level reduction in decibels achieved through incorporation of noise attenuation (between outdoor and indoor levels) in the design and construction of a structure.

"Noncompatible land use" means the use of land that is identified under this part as normally not compatible with the outdoor noise environment (or an adequately attenuated noise reduction level for the indoor activities involved at the location) because the yearly day-night average sound level is above that identified for that or similar use under Appendix A (Table 1) of this part.

"Regional Director" means the Director of the FAA Region having responsibility for the geographic area in which the airport in question is located.

'Restriction affecting flight procedures" means any requirement, limitation, or other action affecting the operation of aircraft, in the air or on the ground.

"Sound exposure level" means the level, in decibels, of the time integral of squared A-weighted sound pressure during a specified period or event, with reference to the square of the standard reference sound pressure of 20 micropascals and a duration of one second.

"Yearly day-night average sound level" (YDNL) means the 365-day average, in decibels, day-night average sound level. The symbol for YDNL is also L_{dn}.

§ 150.9 Designation of noise systems.

For purposes of this part, the following designations apply:

(a) The noise at an airport and surrounding areas covered by a noise exposure map must be measured in A-weighted sound pressure level (L_A) in units of decibels (dBA) in accordance with the specifications and methods prescribed under Appendix A of this part.

(b) The exposure of individuals to noise resulting from the operation of an airport must be established in terms of yearly day-night average sound level (YDNL) calculated in accordance with the specifications and methods prescribed under Appendix A of this part.

(c) Uses of computer models to create noise contours must be in accordance with the criteria prescribed under Appendix A of this part.

§ 150.11 Identification of land uses.

For the purposes of this part, uses of land which are normally compatible or noncompatible with various noise exposure levels to individuals around airports must be identified in accordance with the criteria prescribed under Appendix A of this part. Determination of land use must be based on professional planning criteria and procedures utilizing comprehensive, or master, land use planning, zoning, and building and site designing, as appropriate. If more than one current or future land use is permissible, determination of compatibility must be based on that use most adversely affected by noise.

§ 150.13 Incorporations by reference.

(a) *General.* This part prescribes certain standards and procedures which are not set forth in full text in the rule. Those standards and procedures are hereby incorporated by reference and were approved for incorporation by reference by the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR Part 51.

(b) *Changes to incorporated matter.* Incorporated matter which is subject to subsequent change is incorporated by reference according to the specific reference and to the identification statement. Adoption of any subsequent change in incorporated matter that affects compliance with standards and procedures of this part will be made under 14 CFR Part 11 and 1 CFR Part 51.

(c) *Identification statement.* The complete title or description which identifies each published matter incorporated by reference in this part is as follows:

International Electrotechnical Commission (IEC) Publication No. 179, entitled "Precision Sound Level Meters," dated 1973.

(d) *Availability for purchase.* Published material incorporated by reference in this part may be purchased at the price established by the publisher or distributor at the following mailing addresses.

IEC publications:

(1) The Bureau Central de la Commission Electrotechnique, Internationale, 1, rue de Varembe, Geneva, Switzerland.

(2) American National Standards Institute, 1430 Broadway, New York, NY 10018.

(e) *Availability for inspection.* A copy of each publication incorporated by reference in this part is available for public inspection at the following locations:

(1) FAA Office of the Chief Counsel, Rules Docket, Room 916, Federal Aviation Administration Headquarters Building, 800 Independence Avenue, SW., Washington, D.C. 20591.

(2) Department of Transportation, Branch Library, Room 930, Federal Aviation Administration Headquarters Building, 800 Independence Avenue, SW., Washington, D.C. 20591.

(3) The respective Regional Offices of the Federal Aviation Administration as follows:

(i) New England Regional Office, 12 New England Executive Park, Burlington, Massachusetts 01803.

(ii) Eastern Regional Office, Federal Building, John F. Kennedy (JFK) International Airport, Jamaica, New York 11430.

(iii) Southern Regional Office, 3400 Norman Berry Drive, East Point, Georgia (P.O. Box 20636, Atlanta, Georgia) 30320.

(iv) Great Lakes Regional Office, 2300 East Devon, Des Plaines, Illinois 60018.

(v) Central Regional Office, 601 East 12th Street, Kansas City, Missouri 64106.

(vi) Southwest Regional Office, 4400 Blue Mound Road, (P.O. Box 1689), Fort Worth, Texas 76101.

(vii) Northwest Mountain Regional Office, 17900 Pacific Highway, South, C-68966, Seattle, Washington 98168.

(viii) Western Pacific Regional Office, 15000 Aviation Boulevard, Hawthorne, California (P.O. Box 92007, Worldway Postal Center, Los Angeles) 90009.

(ix) Alaskan Regional Office, 701 "C" Street, Box 14, Anchorage, Alaska 99513.

(xi) European Office, 15, Rue de la Loi (3rd Floor) B1040 Brussels, Belgium.

(4) The Office of the Federal Register, Room 8401, 1100 "L" Street, NW., Washington, D.C.

Subpart B—Development of Noise Exposure Maps and Noise Compatibility Programs

§ 150.21 Noise exposure maps and related descriptions.

(a) Each airport operator may after completion of the consultations and public procedure specified under paragraph (b) of this section submit to the Regional Director five copies of the noise exposure map (or revised map) which identifies each noncompatible land use in each area depicted on the map, as of the date of submission, and five copies of a map each with accompanying documentation setting forth—

(1) The noise exposure based on forecast aircraft operations at the airport for the fifth calendar year beginning after the date of submission (based on reasonable assumptions concerning future type and frequency of aircraft operations, number of nighttime operations, flight patterns, airport layout including any planned airport development, planned land use changes, and demographic changes in the surrounding areas); and

(2) The nature and extent, if any, to which those forecast operations will affect the compatibility and land uses depicted on the map.

(b) Each map, and related documentation submitted under this section must be developed and prepared in accordance with Appendix A of this part, or an FAA approved equivalent, and in consultation with states, and public agencies and planning agencies whose area, or any portion of whose area, of jurisdiction is within the L_{dn} 65 dB contour depicted on the map, FAA regional officials, and other Federal officials having local responsibility for land uses depicted on the map. This consultation must include regular aeronautical users of the airport. The airport operator shall certify that it has afforded interested persons adequate opportunity to submit their views, data, and comments concerning the correctness and adequacy of the draft noise exposure map and descriptions of forecast aircraft operations. Each map and revised map must be accompanied by documentation describing the consultation accomplished under this paragraph and the opportunities afforded the public to review and comment during the development of the map. One copy of all written comments received during consultation shall also be filed with the Regional Director.

(c) The Regional Director acknowledges receipt of noise exposure maps and descriptions and indicates whether they are in compliance with the applicable requirements. The Regional Director publishes in the FEDERAL REGISTER a notice of compliance for each such noise exposure map and description, identifying the airport involved. Such notice includes information as to when and where the map and related documentation are available for public inspection.

(d) If, after submission of a noise exposure map under paragraph (a) of this section, any change in the operation of the airport would create any "substantial, new noncompatible use" in any area depicted on the map beyond that which is forecast for the fifth calendar year after the date of submission, the airport operator shall, in accordance with this section, promptly prepare and submit a revised noise exposure map. A change in the operation of an airport creates a substantial new noncompatible use if that change results in an increase in the yearly day-night average sound level of 1.5 dB or greater in either a land area which was formerly compatible but is thereby made noncompatible under Appendix A (Table 1), or in a land area which was previously determined to be noncompatible under that Table and whose noncompatibility is now significantly increased. Such updating of the map shall include a reassessment of those areas excluded under sec. A150.101(e)(5) of Appendix A because of high ambient noise levels. If the five-year forecast map is based on assumptions involving recommendations in a noise compatibility program which are subsequently disapproved by the FAA, a revised map must be submitted if revised assumptions would create a substantial, new noncompatible use not indicated on the initial five-year map. Revised noise exposure maps are subject to the same requirements and procedures as initial submissions of noise exposure maps under this part.

(e) Each map, or revised map, and description of consultation and opportunity for public comment, submitted to the FAA, must be certified as true and complete under penalty of 18 U.S.C. 1001.

(f) (1) The ASNA Act provides, in section 107 (a) (49 U.S.C. 2107(a)), that:

> No person who acquires property or an interest therein after the date of enactment of the Act in an area surrounding an airport with respect to which a noise exposure map has been submitted under section 103 of the Act shall be entitled to recover damages with respect to the noise attributable to such airport if such person had actual or constructive knowledge of the existence of such noise exposure map unless, in addition to any other elements for recovery of damages, such person can show that—
>
> (i) A significant change in the type or frequency of aircraft operations at the airport; or
>
> (ii) A significant change in the airport layout; or
>
> (iii) A significant change in the flight patterns; or
>
> (iv) A significant increase in nighttime operations; occurred after the date of the acquisition of such property or interest therein and that the damages for which recovery is sought have resulted from any such change or increase."

(2) The Act further provides in section 107(b), (49 U.S.C. 2107(b)):

> That for this purpose, "constructive knowledge" shall be imputed, at a minimum, to any person who acquires property or an interest therein in an area surrounding an airport after the date of enactment of the Act if—
>
> (i) Prior to the date of such acquisition, notice of the existence of a noise exposure map for such area was published at least three times in a newspaper of general circulation in the county in which such property is located; or
>
> (ii) A copy of such noise exposure map is furnished to such person at the time of such acquisition.

(g) For this purpose, the term "significant" in paragraph (f) of this section means that change or increase in one or more of the four factors which results in a "substantial new noncompatible use" as defined in § 150.21(d), affecting the property in issue. Responsibility for applying or interpreting this provision with respect to specific properties rests with local government.

[Doc. No. 18691, 49 FR 49269, Dec. 1, 1984; 50 FR 5063, Feb. 6, 1985]

§ 150.23 Noise compatibility programs.

(a) Any airport operator who has submitted an acceptable noise exposure map under § 150.21 may, after FAA notice of acceptability and other consultation and public procedure specified under paragraphs (b) and (c) of this section, as applicable, submit to the Regional Director five copies of a noise compatibility program.

(b) An airport operator may submit the noise compatibility program at the same time as the noise exposure map.

In this case, the Regional Director will not begin the statutory 180-day review period (for the program) until after FAA reviews the noise exposure map and finds that it and its supporting documentation are in compliance with the applicable requirements.

(c) Each noise compatibility program must be developed and prepared in accordance with Appendix B of this part, or an FAA approved equivalent, and in consultation with FAA regional officials, the officials of the state and of any public agencies and planning agencies whose area, or any portion or whose area, of jurisdiction within the L_{dn} 65 dB noise contours is depicted on the noise exposure map, and other Federal officials having local responsibility of land uses depicted on the map. Consultation with FAA regional officials shall include, to the extent practicable, informal agreement from FAA on proposed new or modified flight procedures. For air carrier airports, consultation must include any air carriers and, to the extent practicable, other aircraft operators using the airport. For other airports, consultation must include, to the extent practicable, aircraft operators using the airport.

(d) Prior to and during the development of a program, and prior to submission of the resulting draft program to the FAA, the airport operator shall afford adequate opportunity for the active and direct participation of the states, public agencies and planning agencies in the areas surrounding the airport, aeronautical users of the airport, and the general public to submit their views, data, and comments on the formulation and adequacy of that program.

(e) Each noise compatibility program submitted to the FAA must consist of at least the following:

(1) A copy of the noise exposure map and its supporting documentation as found in compliance with the applicable requirements by the FAA, per § 150.21(c).

(2) A description and analysis of the alternative measures considered by the airport operator in developing the program, together with a discussion of why each rejected measure was not included in the program.

(3) Program measures proposed to reduce or eliminate present and future noncompatible land uses and a description of the relative contribution of each of the proposed measures to the overall effectiveness of the program.

(4) A description of public participation and the consultation with officials of public agencies and planning agencies in areas surrounding the airport, FAA regional officials and other Federal officials having local responsibility for land uses depicted on th map, any air carriers and other users of the airport.

(5) The actual or anticipated effect of the program on reducing noise exposure to individuals and noncompatible land uses and preventing the introduction of additional noncompatible uses within the area covered by the noise exposure map. The effects must be based on expressed assumptions concerning the type and frequency of aircraft operations, number of nighttime operations, flight patterns, airport layout including planned airport development, planned land use changes, and demographic changes within the L_{dn} 65 dB noise contours.

(6) A description of how the proposed future actions may change any noise control or compatibility plans or actions previously adopted by the airport proprietor.

(7) A summary of the comments at any public hearing on the program and a copy of all written material submitted to the operator under paragraphs (c) and (d) of this section, together with the operator's response and disposition of those comments and materials to demonstrate the program is feasible and reasonably consistent with obtaining the objectives of airport noise compatibility planning under this part.

(8) The period covered by the program, the schedule for implementation of the program, the persons responsible for implementation of each measure in the program, and, for each measure, documentation supporting the feasibility of implementation, including any essential governmental actions, costs, and anticipated sources of funding, that will demonstrate that the program is reasonably consistent

with achieving the goals of airport noise compatibility planning under this part.

(9) Provision for revising the program if made necessary by revision of the noise exposure map.

[Doc. No. 18691, 49 FR 49269, Dec. 18, 1984; 50 FR 5063, Feb. 6, 1985]

Subpart C—Evaluations and Determinations of Effects of Noise Compatibility Programs

§ 150.31 Preliminary review: acknowledgments.

(a) Upon receipt of a noise compatibility program submitted under § 150.23, the Regional Director acknowledges to the airport operator receipt of the program and conducts a preliminary review of the submission.

(b) If, based on the preliminary review, the Regional Director finds that the submission does not conform to the requirements of this part, he disapproves and returns the unacceptable program to the airport operator for reconsideration and development of a program in accordance with this Part.

(c) If, based on the preliminary review, the Regional Director finds that the program conforms to the requirements of this part, the Regional Director publishes in the FEDERAL REGISTER a notice of receipt of the program for comment which indicates the following:

(1) The airport covered by the program, and the date of receipt.

(2) The availability of the program for examination in the offices of the Regional Director and the airport operator.

(3) That comments on the program are invited and, will be considered by the FAA.

(d) The date of signature of the published notice of receipt starts the 180-day approval period for the program.

§ 150.33 Evaluation of programs.

(a) The FAA conducts an evaluation of each noise compatibility program and, based on that evaluation, either approves or disapproves the program. The evaluation includes consideration of proposed measures to determine whether they—

(1) May create an undue burden on interstate or foreign commerce (including unjust discrimination);

(2) Are reasonably consistent with obtaining the goal of reducing existing noncompatible land uses and preventing the introduction of additional noncompatible land uses; and

(3) Include the use of new or modified flight procedures to control the operation of aircraft for purposes of noise control, or affect flight procedures in any way.

(b) The evaluation may also include an evaluation of those proposed measures to determine whether they may adversely affect the exercise of the authority and responsibilities of the Administrator under the Federal Aviation Act of 1958, as amended.

(c) To the extent considered necessary, the FAA may—

(1) Confer with the airport operator and other persons known to have information and views material to the evaluation;

(2) Explore the objectives of the program and the measures, and any alternative measures, for achieving the objectives.

(3) Examine the program for developing a range of alternatives that would eliminate the reasons, if any, for disapproving the program.

(4) Convene an informal meeting with the airport operator and other persons involved in developing or implementing the program for the purposes of gathering all facts relevant to the determination of approval or disapproval of the program and of discussing any needs to accommodate or modify the program as submitted.

(d) If requested by the FAA, the airport operator shall furnish all information needed to complete FAA's review under (c).

(e) An airport operator may, at any time before approval or disapproval of a program, withdraw or revise the program. If the airport operator withdraws or revises the program or indicates to the Regional Director, in writing, the intention to revise the program, the Regional Director terminates the evaluation and notifies the airport operator of that action. That termination cancels the 180-day review period. The FAA does not evaluate a second program for any airport until any previously submitted program has been withdrawn or a determination on it is issued. A new evaluation is commenced upon receipt of a revised program, and a new 180-day approval period is begun, unless the Regional Director finds that the modification made, in light of the overall revised program, can be integrated into the unmodified portions of the revised program without exceeding the original 180-day approval period or causing undue expense to the government.

§ 150.35 Determinations; publications; effectivity.

(a) The FAA issues a determination approving or disapproving each airport noise compatibility program (and revised program). Portions of a program may be individually approved or disapproved. No conditional approvals will be issued. A determination on a program acceptable under this part is issued within 180 days after the program is received under § 150.23 of this part or it may be considered approved, except that this time period may be exceeded for any portion of a program relating to the use of flight procedures for noise control purposes. A determination on portions of a program covered by the exceptions to the 180-day review period for approval will be issued within a reasonable time after receipt of the program. Determinations relating to the use of any flight procedure for noise control purposes may be issued either in connection with the determination on other portions of the program or separately. Except as provided by this paragraph, no approval of any noise compatibility program, or any portion of a program, may be implied in the absence of the FAA's express approval.

(b) The Administrator approves programs under this part, if—

(1) It is found that the program measures to be implemented would not create an undue burden on interstate or foreign commerce (including any unjust discrimination) and are reasonably consistent with achieving the goals of reducing existing noncompatible land uses around the airport and of preventing the introduction of additional noncompatible land uses;

(2) The program provides for revision if made necessary by the revision of the noise map; and

(3) Those aspects of programs relating to the use of flight procedures for noise control can be implemented within the period covered by the program and without—

(i) Reducing the level of aviation safety provided;

(ii) Derogating the requisite level of protection for aircraft, their occupants and persons and property on the ground;

(iii) Adversely affecting the efficient use and management of the Navigable Airspace and Air Traffic Control Systems; or

(iv) Adversely affecting any other powers and responsibilities of the Administrator prescribed by law or any other program, standard, or requirement established in accordance with law.

(c) When a determination is issued, the Regional Director notifies the airport operator and publishes a notice of approval or disapproval in the FEDERAL REGISTER identifying the nature and extent of the determination.

(d) Approvals issued under this part for a program or portion thereof become effective as specified therein and may be withdrawn when one of the following occurs:

(1) The program or portion thereof is required to be revised under this part or under its own terms, and is not so revised;

(2) If a revision has been submitted for approval, a determination is issued on the revised program or portion thereof, that is inconsistent with the prior approval.

(3) A term or condition of the program, or portion thereof, or its approval is violated by the responsible government body.

(4) A flight procedure or other FAA action upon which the approved program or portion thereof is dependent is subsequently disapproved, significantly altered, or rescinded by the FAA.

(5) The airport operator requests rescission of the approval.

(6) Impacts on flight procedures, air traffic management, or air commerce occur which could not be foreseen at the time of approval.

A determination may be sooner rescinded or modified for cause with at least 30 days written notice to the airport operator of the FAA's intention to rescind or modify the determination for the reasons stated in the notice. The airport operator may, during the 30-day period, submit to the Regional Director for consideration any reasons and circumstances why the determination should not be rescinded or modified on the basis stated in the notice of intent. Thereafter, the FAA either rescinds or modifies the determination consistent with the notice or withdraws the notice of intent and terminates the action.

(e) Determinations may contain conditions which must be satisfied prior to implementation of any portion of the program relating to flight procedures affecting airport or aircraft operations.

(f) Noise exposure maps for current and five year forecast conditions that are submitted and approved with noise compatibility programs are considered to be the new FAA accepted noise exposure maps for purposes of Part 150.

APPENDIX A—NOISE EXPOSURE MAPS

PART A—GENERAL

Sec. A150.1 Purpose.
Sec. A150.3 Noise descriptors.
Sec. A150.5 Noise measurement procedures and equipment.

PART B—NOISE EXPOSURE MAP DEVELOPMENT

Sec. A150.101 Noise contours and land usages.
Sec. A150.103 Use of computer prediction model.
Sec. A150.105 Identification of public agencies and planning agencies.

PART C—MATHEMATICAL DESCRIPTIONS

Sec. A150.201 General.
Sec. A150.203 Symbols.
Sec. A150.205 Mathematical computations.

PART A—GENERAL

Sec. A150.1 Purpose.

(a) This appendix establishes a uniform methodology for the development and preparation of airport noise exposure maps. That methodology includes a single system of measuring noise at airports for which there is a highly reliable relationship between projected noise exposure and surveyed reactions of people to noise along with a separate single system for determining the exposure of individuals to noise. It also identifies land uses which, for the purpose of this part are considered to be compatible with various exposures of individuals to noise around airports.

(b) This appendix provides for the use of the FAA's Integrated Noise Model (INM) or an FAA approved equivalent, for developing standardized noise exposure maps and predicting noise impacts. Noise monitoring may be utilized by airport operators for data acquisition and data refinement, but is not required by this part for the development of noise exposure maps or airport noise compatibility programs. Whenever noise monitoring is used, under this part, it should be accomplished in accordance with Sec. A150.5 of this appendix.

Sec. A150.3 Noise descriptors.

(a) *Airport Noise Measurement.* The A-Weighted Sound Level, measured, filtered and recorded in accordance with Sec. A150.5 of this appendix, must be employed as the unit for the measurement of single event noise at airports and in the areas surrounding the airports.

(b) *Airport Noise Exposure.* The yearly day-night average sound level (YDNL) must be employed for the analysis and characterization of multiple aircraft noise events and for determining the cumulative exposure of individuals to noise around airports.

Sec. A150.5 Noise measurement procedures and equipment.

(a) Sound levels must be measured or analyzed with equipment having the "A" frequency weighting, filter characteristics, and the "slow response" characteristics as defined in International Electrotechnical Commission (IEC) Publication No. 179, entitled "Precision Sound Level Meters" as incorporated by reference in Part 150 under § 150.11. For purposes of this part, the tolerances allowed for general purpose, type 2 sound level meters in IEU 179, are acceptable.

(b) Noise measurements and documentation must be in accordance with accepted acoustical measurement methodology, such as those described in American National Standards Institute publication ANSI 51.13, dated 1971 as revised 1979, entitled "ANS—Methods for the Measurement of Sound Pressure Levels"; ARP No. 796, dated 1969, entitled "Measurement of Aircraft Exterior Noise in the Field"; "Handbook of Noise Measurement," Ninth Ed. 1980, by Arnold

P.G. Peterson; or "Acoustic Noise Measurement," dated Jan., 1979, by J.R. Hassell and K. Zaveri. For purposes of this part, measurements intended for comparison to a State or local standard or with another transportation noise source (including other aircraft) must be reported in maximum A-weighted sound levels (L_{AM}); for computation or validation of the yearly day-night average level (L_{dn}), measurements must be reported in sound exposure level (L_{AE}), as defined in Sec. A150.205 of this appendix.

[Doc. No. 18691, 49 FR 49269, Dec. 18, 1984; 50 FR 5064, Feb. 6, 1985]

PART B—NOISE EXPOSURE MAP DEVELOPMENT

Sec. A150.101 Noise contours and land usages.

(a) To determine the extent of the noise impact around an airport, airport proprietors developing noise exposure maps in accordance with this part must develop L_{dn} contours. Continuous contours must be developed for YDNL levels of 65, 70, and 75 (additional contours may be developed and depicted when appropriate). In those areas where YDNL values are 65 YDNL or greater, the airport operator shall identify land uses and determine land use compatibility in accordance with the standards and procedures of this appendix.

(b) Table 1 of this appendix describes compatible land use information for several land uses as a function of YDNL values. The ranges of YDNL values in Table 1 reflect the statistical variability for the responses of large groups of people to noise. Any particular level might not, therefore, accurately assess an individual's perception of an actual noise environment. Compatible or noncompatible land use is determined by comparing the predicted or measured YDNL values at a site with the values given. Adjustments or modifications of the descriptions of the land-use categories may be desirable after consideration of specific local conditions.

(c) Compatibility designations in Table 1 generally refer to the major use of the site. If other uses with greater sensitivity to noise are permitted by local government at a site, a determination of compatibility must be based on that use which is most adversely affected by noise. When appropriate, noise level reduction through incorporation of sound attenuation into the design and construction of a structure may be necessary to achieve compatibility.

(d) For the purpose of compliance with this part, all land uses are considered to be compatible with noise levels less than L_{dn} 65 dB. Local needs or values may dictate further delineation based on local requirements or determinations.

(e) Except as provided in (f) below, the noise exposure maps must also contain and indentify:

(1) Runway locations.

(2) Flight tracks.

(3) Noise contours of L_{dn} 65, 70, and 75 dB resulting from aircraft operations.

(4) Outline of the airport boundaries.

(5) Noncompatible land uses within the noise contours, including those within the L_{dn} 65 dB contours. (No land use has to be identified as noncompatible if the self-generated noise from that use and/or the ambient noise from other nonaircraft and nonairport uses is equal to or greater than the noise from aircraft and airport sources.)

(6) Location of noise sensitive public buildings (such as schools, hospitals, and health care facilities), and properties on or eligible for inclusion in the National Register of Historic Places.

(7) Locations of any aircraft noise monitoring sites utilized for data acquisition and refinement procedures.

(8) Estimates of the number of people residing within the L_{dn} 65, 70, and 75 dB contours.

(9) Depiction of the required noise contours over a land use map of a sufficient scale and quality to discern streets and other identifiable geographic features.

(f) Notwithstanding any other provision of this Part, noise exposure maps prepared in connection with studies which were either Federally funded or Federally approved and which commenced before October 1, 1981, are not required to be modified to contain the following items:

(1) Flight tracks depicted on the map.

(2) Use of ambient noise to determine land use compatibility.

(3) The L_{dn} 70 dB noise contour and data related to L_{dn} 70 dB contour. When determinations on land use compatibility using Table 1 differ between L_{dn} 65-70 dB and the L_{dn} 70-75 dB, determinations should either use the more conservative L_{dn} 70-75 dB column or reflect determinations based on local needs and values.

(4) Estimates of the number of people residing within the L_{dn} 65, 70, and 75 dB contours.

TABLE 1—LAND USE COMPATIBILITY* WITH YEARLY DAY-NIGHT AVERAGE SOUND LEVELS

Land use	Yearly day-night average sound level (L_{dn}) in decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
Residential						
Residential, other than mobile homes and transient lodgings	Y	N(1)	N(1)	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N(1)	N(1)	N(1)	N	N
Public Use						
Schools	Y	N(1)	N(1)	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	30	N	N
Transportation	Y	Y	Y(2)	Y(3)	Y(4)	Y(4)
Parking	Y	Y	Y(2)	Y(3)	Y(4)	N
Commercial Use						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail—building materials, hardware and farm equipment	Y	Y	Y(2)	Y(3)	Y(4)	N
Retail trade—general	Y	Y	25	30	N	N
Utilities	Y	Y	Y(2)	Y(3)	Y(4)	N
Communication	Y	Y	25	30	N	N
Manufacturing and Production						
Manufacturing, general	Y	Y	Y(2)	Y(3)	Y(4)	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y(6)	Y(7)	Y(8)	Y(8)	Y(8)
Livestock farming and breeding	Y	Y(6)	Y(7)	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
Recreational						
Outdoor sports arenas and spectator sports	Y	Y(5)	Y(5)	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts and camps	Y	Y	Y	N	N	N
Golf courses, riding stables and water recreation	Y	Y	25	30	N	N

Numbers in parentheses refer to notes.

*The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable or unacceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.

KEY TO TABLE 1

SLUCM = Standard Land Use Coding Manual.

Y (Yes) = Land Use and related structures compatible without restrictions.

N (No) = Land Use and related structures are not compatible and should be prohibited.

NLR = Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.

25, 30, or 35 = Land use and related structures generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated into design and construction of structure.

NOTES FOR TABLE 1

(1) Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.

(2) Measures to achieve NLR 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

(3) Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

(4) Measures to achieve NLR 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal level is low.

(5) Land use compatible provided special sound reinforcement systems are installed.

(6) Residential buildings require an NLR of 25.

(7) Residential buildings require an NLR of 30.

(8) Residential buildings not permitted.

Sec. A150.103 Use of computer prediction model.

(a) The airport operator shall acquire the aviation operations data necessary to develop noise exposure contours using an FAA approved methodology or computer program, such as the Integrated Noise Model (INM). In considering approval of a methodology or computer program, key factors include the demonstrated capability to produce the required output and the public availability of the program or methodology to provide interested parties the opportunity to substantiate the results.

(b) The following information must be obtained for input to the calculation of noise exposure contours:

(1) A map of the airport and its environs at an adequately detailed scale (not less than 1 inch to 8,000 feet) indicating runway length, alignments, landing thresholds, takeoff start-of-roll points, airport boundary, and flight tracks out to at least 30,000 feet from the end of each runway.

(2) Airport activity levels and operational data which will indicate, on an annual average-daily-basis, the number of aircraft, by type of aircraft, which utilize each flight track, in both the standard daytime (0700-2200 hours local) and nighttime (2200-0700 hours local) periods for both landings and takeoffs.

(3) For landings—glide slopes, glide slope intercept altitudes, and other pertinent information needed to establish approach profiles along with the engine power levels needed to fly that approach profile.

(4) For takeoffs—the flight profile which is the relationship of altitude to distance from start-of-roll along with the engine power levels needed to fly that takeoff profile; these data must reflect the use of noise abatement departure procedures and, if applicable, the takeoff weight of the aircraft or some proxy for weight such as stage length.

(5) Existing topographical or airspace restrictions which preclude the utilization of alternative flight tracks.

(6) The government furnished data depicting aircraft noise characteristics (if not already a part of the computer program's stored data bank).

(7) Airport elevation and average temperature.

Sec. A150.105 Identification of public agencies and planning agencies.

(a) The airport proprietor shall identify each public agency and planning agency whose jurisdiction or responsibility is either wholly or partially within the L_{dn} 65 dB boundary.

(b) For those agencies identified in (a) that have land use planning and control authority, the supporting documentation shall identify their geographic areas of jurisdiction.

PART C—MATHEMATICAL DESCRIPTIONS

Sec. A150.201 General.

The following mathematical descriptions provide the most precise definition of the yearly day-night average sound level (L_{dn}), the data necessary for its calculation, and the methods for computing it.

Sec. A150.203 Symbols.

The following symbols are used in the computation of L_{dn}:

Measure (in dB)	Symbol
Average Sound Level, During Time T	L_T
Day-Night Average Sound Level (individual day)	L_{dni}
Yearly Day-Night Average Sound Level	L_{dn}
Sound Exposure Level	L_{AE}

Sec. A150.205 Mathematical computations

(a) Average sound level must be computed in accordance with the following formula:

$$L_T = 10 \log_{10} \left[\frac{1}{T} \int_0^T 10^{L_A(t)/10} \, dt \right] \qquad (1)$$

where T is the length of the time period, in seconds, during which the average is taken; $L_A(t)$ is the instantaneous time varying A-weighted sound level during the time period T.

(1) NOTE: When a noise environment is caused by a number of identifiable noise events, such as aircraft flyovers, average sound level may be conveniently calculated from the sound exposure levels of the individual events occurring within a time period T:

$$L_T = 10 \log_{10} \left[\frac{1}{T} \sum_{i=1}^{n} 10^{L_{AEi}/10} \right] \quad (2)$$

where L_{AEi} is the sound exposure level of the i-th event, in a series of n events in time period T, in seconds.

(2) NOTE: When T is one hour, L_T is referred to as one-hour average sound level.

(b) Day-night average sound level (individual day) must be computed in accordance with the following formula:

$$L_{dn} = 10 \log_{10} \left[\frac{1}{86400} \left(\int_{0000}^{0700} 10^{[L_A(t)+10]/10} dt + \int_{0700}^{2200} 10^{L_A(t)/10} dt + \int_{2200}^{2400} 10^{[L_A(t)+10]/10} dt \right) \right] \quad (3)$$

Time is in seconds, so the limits shown in hours and minutes are actually interpreted in seconds. It is often convenient to compute day-night average sound level from the one-hour average sound levels obtained during successive hours.

(c) Yearly day-night average sound level must be computed in accordance with the following formula:

$$L_{dn} = 10 \log_{10} \frac{1}{365} \sum_{i=1}^{365} 10^{L_{dni}/10} \quad (4)$$

where L_{dni} is the day-night average sound level for the i-th day out of one year.

(d) Sound exposure level must be computed in accordance with the following formula:

$$L_{AE} = 10 \log_{10}\left(\frac{1}{t_o} \int_{t_1}^{t_2} 10^{L_A(t)/10} \, dt \right) \quad (5)$$

where t_o is one second and $L_A(t)$ is the time-varying A-weighted sound level in the time interval t_1 to t_2.

The time interval should be sufficiently large that it encompasses all the significant sound of a designated event.

The requisite integral may be approximated with sufficient accuracy by integrating $L_A(t)$ over the time interval during which $L_A(t)$ lies within 10 decibels of its maximum value, before and after the maximum occurs.

APPENDIX B—NOISE COMPATIBILITY PROGRAMS

Sec. B150.1 Scope and purpose.
Sec. B150.3 Requirement for noise map.
Sec. B150.5 Program standards.
Sec. B150.7 Analysis of program alternatives.
Sec. B150.9 Equivalent programs.

Sec. B150.1 Scope and purpose.

(a) This appendix prescribes the content and the methods for developing noise compatibility programs authorized under this part. Each program must set forth the measures which the airport operator (or other person or agency responsible) has taken, or proposes to take, for the reduction of existing noncompatible land uses and the prevention of the introduction of additional noncompatible land uses within the area covered by the noise exposure map submitted by the operator.

(b) The purpose of a noise compatibility program is:

(1) To promote a planning process through which the airport operator can examine and analyze the noise impact created by the operation of an airport, as well as the costs and benefits associated with various alternative noise reduction techniques, and the responsible impacted land use control jurisdictions can examine existing and forecast areas of noncompatibility and consider actions to reduce noncompatible uses.

(2) To bring together through public participation, agency coordination, and overall cooperation, all interested parties with their respective authorities and obligations, thereby facilitating the creation of an agreed upon noise abatement plan especially suited to the individual airport location while at the same time not unduly affecting the national air transportation system.

(3) To develop comprehensive and implementable noise reduction techniques and land use controls which, to the maximum extent feasible, will confine severe aircraft YDNL values of L_{dn} 75 dB or greater to areas included within the airport boundary and will establish and maintain compatible land uses in the areas affected by noise between the L_{dn} 65 and 75 dB contours.

Sec. B150.3 Requirement for noise map.

(a) It is required that a current and complete noise exposure map and its supporting documentation as found in compliance with the applicable requirements by the FAA, per § 150.21(c) be included in each noise compatibility program:

(1) To identify existing and future noncompatible land uses, based on airport operation and off-airport land uses, which have generated the need to develop a program.

(2) To identify changes in noncompatible uses to be derived from proposed program measures.

(b) If the proposed noise compatibility program would yield maps differing from those previously submitted to FAA, the program shall be accompanied by appropriately revised maps. Such revisions must be prepared in accordance with the requirements of Sec. A150.101(e) of Appendix A and will be accepted by FAA in accordance with § 150.35(f).

Sec. B150.5 Program standards.

Based upon the airport noise exposure and noncompatible land uses identified in the map, the airport operator shall evaluate the several alternative noise control actions and develop a noise compatibility program which—

(a) Reduces existing noncompatible uses and prevents or reduces the probability of the establishment of additional noncompatible uses;

(b) Does not impose undue burden on interstate and foreign commerce;

(c) Provides for revision in accordance with § 150.23 of this part.

(d) Is not unjustly discriminatory.

(e) Does not derogate safety or adversely affect the safe and efficient use of airspace.

(f) To the extent practicable, meets both local needs and needs of the national air transportation system, considering tradeoffs between economic benefits derived from the airport and the noise impact.

(g) Can be implemented in a manner consistent with all of the powers and duties of the Administrator of FAA.

Sec. B150.7 Analysis of program alternatives.

(a) Noise control alternatives must be considered and presented according to the following categories:

(1) Noise abatement alternatives for which the airport operator has adequate implementation authority.

(2) Noise abatement alternatives for which the requisite implementation authority is vested in a local agency or political subdivision governing body, or a state agency or political subdivision governing body.

(3) Noise abatement options for which requisite authority is vested in the FAA or other Federal agency.

(b) At a minimum, the operator shall analyze and report on the following alternatives, subject to the constraints that the strategies are appropriate to the specific airport (for example, an evaluation of night curfews is not appropriate if there are no night flights and none are forecast):

(1) Acquisition of land and interests therein, including, but not limited to air rights, easements, and development rights, to ensure the use of property for purposes which are compatible with airport operations.

(2) The construction of barriers and acoustical shielding, including the soundproofing of public buildings.

(3) The implementation of a preferential runway system.

(4) The use of flight procedures (including the modifications of flight tracks) to control the operation of aircraft to reduce exposure of individuals (or specific noise sensitive areas) to noise in the area around the airport.

(5) The implementation of any restriction on the use of airport by any type or class of aircraft based on the noise characteristics of those aircraft. Such restrictions may include, but are not limited to—

(i) Denial of use of the airport to aircraft types or classes which do not meet Federal noise standards;

(ii) Capacity limitations based on the relative noisiness of different types of aircraft;

(iii) Requirement that aircraft using the airport must use noise abatement takeoff or approach procedures previously approved as safe by the FAA;

(iv) Landing fees based on FAA certificated or estimated noise emission levels or on time of arrival; and

(v) Partial or complete curfews.

(6) Other actions or combinations of actions which would have a beneficial noise control or abatement impact on the public.

(7) Other actions recommended for analysis by the FAA for the specific airport.

(c) For those alternatives selected for implementation, the program must identify the agency or agencies responsible for such implementation, whether those agencies have agreed to the implementation, and the approximate schedule agreed upon.

Sec. B150.9 Equivalent programs.

(a) Notwithstanding any other provision of this part, noise compatibility programs prepared in connection with studies which were either Federally funded or Federally approved and commenced before October 1, 1981, are not required to be modified to contain the following items:

(1) Flight tracks.

(2) A noise contour of L_{dn} 70 dB resulting from aircraft operations and data related to the L_{dn} 70 dB contour. When determinations on land use compatibility using Table 1 of Appendix A differ between L_{dn} 65-70 dB and L_{dn} 70-75 dB, the determinations should either use the more conservative L_{dn} 70-75 dB column or reflect determinations based on local needs and values.

(3) The categorization of alternatives pursuant to Sec. B150.7(a), although the persons responsible for implementation of each measure in the program must still be identified in accordance with § 150.23(e)(8).

(4) Use of ambient noise to determine land use compatibility.

(b) Previously prepared noise compatibility program documentation may be supplemented to include these and other program requirements which have not been excepted.

PART 151—FEDERAL AID TO AIRPORTS

Subpart A—General Requirements

Sec.
151.1 Applicability.
151.3 National Airport Plan.
151.5 General policies.
151.7 Grants of funds: General policies.
151.9 Runway clear zones: General.
151.11 Runway clear zones: Requirements.
151.13 Federal-aid Airport Program: Policy affecting landing aid requirements.
151.15 Federal-aid Airport Program: Policy affecting runway or taxiway remarking.

Subpart B—Rules and Procedures for Airport Development Projects

151.21 Procedures: Application; general information.
151.23 Procedures: Application; funding information.

Sec.
151.24 Procedures: Application; information on estimated project costs.
151.25 Procedures: Application; information as to property interests.
151.26 Procedures: Applications; compatible land use information; consideration of local community interest; relocation of displaced persons.
151.27 Procedures: Application, plans, specifications, and appraisals.
151.29 Procedures: Offer, amendment, and acceptance.
151.31 Procedures: Grant agreement.
151.33 Cosponsorship and agency.
151.35 Airport development and facilities to which Subparts B and C apply.
151.37 Sponsor eligibility.
151.39 Project eligibility.
151.41 Project costs.
151.43 United States share of project costs.
151.45 Performance of construction work: General requirements.
151.47 Performance of construction work: Letting of contracts.
151.49 Performance of construction work: Contract requirements.
151.51 Performance of construction work: Sponsor force account.
151.53 Performance of construction work: Labor requirements.
151.54 Equal employment opportunity requirements: Before July 1, 1968.
151.54a Equal employment opportunity requirements: After June 30, 1968.
151.55 Accounting and audit.
151.57 Grant payments: General.
151.59 Grant payments: Land acquisition.
151.61 Grant payments: Partial.
151.63 Grant payments: Semifinal and final.
151.65 Memoranda and hearings.
151.67 Forms.

Subpart C—Project Programming Standards

151.71 Applicability.
151.72 Incorporation by reference of technical guidelines in Advisory Circulars.
151.73 Land acquisition.
151.75 Preparation of site.
151.77 Runway paving: General rules.
151.79 Runway paving: Second runway; wind conditions.
151.80 Runway paving: Additional runway; other conditions.
151.81 Taxiway paving.
151.83 Aprons.
151.85 Special treatment areas.
151.86 Lighting and electrical work: General.
151.87 Lighting and electrical work: Standards.
151.89 Roads.
151.91 Removal of obstructions.
Sec.
151.93 Buildings; utilities; sidewalks; parking areas; and landscaping.
151.95 Fences; distance markers; navigational and landing aids; and offsite work.
151.97 Maintenance and repair.
151.99 Modifications of programing standards.

Subpart D—Rules and Procedures for Advance Planning and Engineering Proposals

151.111 Advance planning proposals: General.
151.113 Advance planning proposals: Sponsor eligibility.
151.115 Advance planning proposals: Cosponsorship and agency.
151.117 Advance planning proposals: Procedures; application.
151.119 Advance planning proposals: Procedures; funding.
151.121 Procedures: Offer; sponsor assurances.
151.123 Procedures: Offer; amendment; acceptance; advance planning agreement.
151.125 Allowable advance planning costs.
151.127 Accounting and audit.
151.129 Payments.
151.131 Forms.

APPENDIX A
APPENDIX B
APPENDIX C
APPENDIX D
APPENDIX E
APPENDIX F
APPENDIX G
APPENDIX H
APPENDIX I

Subpart A—General Requirements

AUTHORITY: 60 Stat. 170; sec. 10, 62 Stat. 453; secs. 313(a), 314, 601, 607, 72 Stat. 752; secs. 3, 4, 63 Stat. 700; 49 U.S.C. 1101-1120, 1159, 1354(a), 1355, 1421, 1427; 50 U.S.C. App. 1622b, 1622c, unless otherwise noted.

§ 151.1 Applicability.

This part prescribes the policies and procedures for administering the Federal-aid Airport Program under the Federal Airport Act, as amended (49 U.S.C. 1101 et seq.).

[Doc. No. 1329, 27 FR 12349, Dec. 13, 1962]

§ 151.3 National Airport Plan.

(a) Under the Federal Airport Act, the FAA prepares each year a "National Airport Plan" for developing public airports in the United States, Puerto Rico, the Virgin Islands, and Guam. In terms of general location and type of development, the National Airport Plan specifies the maximum limits of airport development that is necessary to provide a system of public airports adequate to anticipate and meet the needs of civil aeronautics.

(b) If, within the forecast period, an airport will have a substantial aeronautical necessity, it may be included in the National Airport Plan. Only work on an airport included in the current Plan is eligible for inclusion in the Federal-aid Airport Program to be undertaken within currently available appropriations and authorizations. However, the inclusion of an airport in the National Airport Plan does not commit the United States to include it in the Federal-aid Airport Program. In addition, the local community concerned is not required to proceed with planning or development of an airport included in the National Airport Plan.

[Amdt. 151-8, 30 FR 8039, June 23, 1965]

§ 151.5 General policies.

(a) *Airport layout plan.* As used in this part, "airport layout plan" means the basic plan for the layout of an eligible airport that shows, as a minimum—

(1) The present boundaries of the airport and of the offsite areas that the sponsor owns or controls for airport purposes, and of their proposed additions;

(2) The location and nature of existing and proposed airport facilities (such as runways, taxiways, aprons, terminal buildings, hangars, and roads) and of their proposed modifications and extensions; and

(3) The location of existing and proposed non-aviation areas, and of their existing improvements.

All airport development under the Federal-aid Airport Program must be done in accordance with an approved airport layout plan. Each airport layout plan, and any change in it, is subject to FAA approval. The Administrator's signature on the face of an original airport layout plan, or of any change in it, indicates FAA approval. The FAA approves an airport layout plan only if the airport development is sound and meets applicable requirements.

(b) *Safe, useful, and usable unit.* Except as provided in paragraph (d) of this section, each advance planning and engineering proposal or airport development project must provide for the planning or development of—

(1) An airport or unit of an airport that is safe, useful, and usable; or

(2) An additional facility that increases the safety, usefulness, or usability of an airport.

(c) *National defense needs.* The needs of national defense are fully considered in administering the Federal-aid Airport Program. However, approval of an advance planning and engineering proposal or a project application is limited to planning or airport development necessary for civil aviation.

(d) *Stage development.* In any case in which airport development can be accomplished more economically under stage construction, federal funds may be programmed in advance for the development over two or more years under two or more grant agreements. In such a case, the FAA makes a tentative allocation of funds for both the current and future fiscal years, rather than allocating the entire federal share in one fiscal year. A grant agreement is made only during the fiscal year in which funds are authorized to be obligated. Advance planning and engineering grants are not made under this paragraph.

[Amdt. 151-8, 30 FR 8039, June 23, 1965]

§ 151.7 Grants of funds: General policies.

(a) *Compliance with sponsorship requirements.* The FAA authorizes the expenditure of funds under the Federal-aid Airport Program for airport planning and engineering or for airport development only if the Administrator is satisfied that the sponsor has met or will meet the requirements established by existing and proposed agreements with the United States with respect to any airport that the sponsor owns or controls.

(1) Agreements with the United States to which this requirement of compliance applies include—

(i) Any grant agreement made under the Federal-aid Airport Program;

(ii) Any covenant in a conveyance under section 16 of the Federal Airport Act;

(iii) Any covenant in a conveyance of surplus airport property either under section 13(g) of the Surplus Property Act (50 U.S.C. App. 1622(g)) or under Regulation 16 of the War Assets Administration; and

(iv) Any AP-4 agreement made under the terminated Development Landing Areas National Defense Program and the Development Civil Landing Areas Program.

This requirement does not apply to assurances required under section 602 of the Civil Rights Act of 1964 (42 U.S.C. 2000d-1) and § 15.7 of the Federal Aviation Regulations (14 CFR 15.7).

(2) If it appears that a sponsor has failed to comply with a requirement of an agreement with the United States with respect to an airport, the FAA notifies him of this fact and affords him an opportunity to submit materials to refute the allegation of noncompliance or to achieve compliance.

(3) If a project is otherwise eligible under the Federal-aid Airport Program, a grant may be made to a sponsor who has not complied with an agreement if the sponsor shows—

(i) That the noncompliance is caused by factors beyond his control; or

(ii) That the following circumstances exist:

(*a*) The noncompliance consisted of a failure, through mistake or ignorance, to perform minor conditions in old agreements with the Federal Government; and

(*b*) The sponsor is taking reasonable action promptly to correct the deficiency or the deficiency relates to an obligation that is no longer required for the safe and efficient use of the airport under existing law and policy.

(b) *Small proposals and projects.* Unless there is otherwise a special need for United States participation, the FAA includes an advance planning and engineering proposal or an airport development project in the Federal-aid Airport Program only if—

(1) The advance planning and engineering proposal involves more than $1,000 in United States funds; and

(2) The project application involves more than $5,000 in United States funds.

Whenever possible, the sponsor must consolidate small projects on a single airport in one grant agreement even though the airport development is to be accomplished over a period of years.

(c) *Previously obligated work.* Unless the Administrator specifically authorizes it, no advance planning and engineering proposal or project application may include any planning, engineering, or construction work included in a prior agreement with the United States obligating the sponsor or any other non-United States public agency to do the work, and entitling the sponsor or any other non-United States public agency to payment of United States funds for all or part of the work.

(Secs. 1-15, 17-21, 60 Stat. 170, 49 U.S.C. 1120)

[Amdt. 151-8, 30 FR 8039, June 23, 1965, as amended by Amdt. 151-17, 31 FR 16524, Dec. 28, 1966; Amdt. 151-19, 32 FR 9220, June 29, 1967]

§ 151.9 Runway clear zones: General.

(a) Whenever funds are allocated for developing new runways or landing strips, or to improve or repair existing runways, the sponsor must own, acquire, or agree to acquire, runway clear zones. Exceptions are considered (on the basis of a full statement of facts by the sponsor) upon a showing of uneconomical acquisition costs, or lack of necessity for the acquisition.

(b) For the purpose of this part, a runway clear zone is an area at ground level which begins at the end of each primary surface defined in § 77.27(a) and extends with the width of each approach surface defined in § 77.27 (b) and (c), to terminate directly below each approach surface slope at the point, or points, where the slope reaches a height of 50 feet above the elevation of the runway or 50 feet above the terrain at the outer extremity of the clear zone, whichever distance is shorter.

(c) For the purposes of this section, an airport operator or owner is considered to have an adequate property interest if it has an easement (or a covenant running with the land) giving it enough control to rid the clear zone of all obstructions (objects so far as they project above the approach surfaces established by § 77.27 (b) and (c) of Part 77 of this chapter), and to prevent the creation of future obstructions; together with the right of entrance and exit for those purposes, to ensure the safe and unrestricted passage of aircraft in and over the area.

[Doc. No. 1329, 27 FR 12349, Dec. 13, 1962, as amended by Amdt. 151-7, 30 FR 7484, June 8, 1965; Amdt. 151-21, 33 FR 258, Jan. 9 1968]

§ 151.11 Runway clear zones; requirements.

(a) In projects involving grants-in-aid under the Federal-aid Airport Program, a sponsor must own, acquire, or agree to acquire an adequate property interest in runway clear zone areas as prescribed in paragraph (b), (c), (d), or (e) of this section, as applicable. Property interests that a sponsor acquires to meet the requirements of this section are eligible for inclusion in the Program.

(b) On new airports, the sponsor must own, acquire, or agree to acquire adequate property interests in runway clear zone areas (in connection with initial land acquisition) for all eligible runways or landing strips, without substantial deviation from standard configuration and length.

(c) On existing airports where new runways or landing strips are developed, the sponsor must own, acquire, or agree to acquire adequate property interests in runway clear zone areas for each runway and landing strip to be developed or extended, to the extent that the Administrator determines practical and feasible considering all facts presented by the airport owner or operator, preferably without substantial deviation from standard configuration and length.

(d) On existing airports where improvements are made to runways or landing strips, the sponsor must own, acquire, or agree to acquire adequate property interests in runway clear zone areas for each runway or landing strip that is to be improved to the extent that the Administrator determines is practical and feasible with regard to standard configuration, length, and property interests, considering all facts presented by the airport owner or operator. Any development that improves a specific runway or landing strip is considered to be a runway improvement, including runway lighting and the developing or lighting of taxiways serving a runway.

(e) On existing airports where substantial improvements are made that do not benefit a specific runway or landing strip, such as overall grading or drainage, terminal area or building developments, the sponsor must own, acquire, or agree to acquire adequate property interests in runway clear zone areas for the dominant runway or landing strip to the extent that the Administrator determines is practical and feasible, with regard to standard configuration, length, and property interests, considering all facts presented by the airport owner or operator.

(f) If a sponsor or other public agency shows that it is legally able to prevent the future erection or creation of obstructions in the runway clear zone area, and adopts protective measures to prohibit their future erection or creation, that showing is acceptable for the purposes of paragraphs (d) and (e) of this section in place of an adequate property interest (except for rights required for removing existing obstructions). In such a case, there must be an agreement between the FAA and the sponsor for removing or marking or lighting (to be determined in each case) any existing obstruction to air navigation In each case, the sponsor must furnish information as to the specific height limitations established and as to the current and foreseeable future use of the property to which they apply. The information must include an acceptable legal opinion of the validity of the measures adopted, including a conclusion that the height limitations are not unreasonable in view of current and foreseeable future use of the property, and are a reasonable exercise of the police power, together with the reasons or basis supporting the opinion.

(g) The authority exercised by the Administrator under paragraphs (b), (c), (d), and (e) of this section to allow a deviation from, or the extent of conformity to, standard configuration or length of runway clear zones, or to determine the adequacy of property interests therein, is also exercised by Regional Directors.

[Doc. No. 1329, 27 FR 12350, Dec. 13, 1962, as amended by Amdt. 151-22, 33 FR 8267, June 4, 1968; Amdt. 151-25, 33 FR 14535, Sept. 27, 1968]

§ 151.13 Federal-aid Airport Program: Policy affecting landing aid requirements.

(a) *Landing aid requirements.* No project for developing or improving an airport may be approved for the Program unless it provides for acquiring or installing such of the following landing aids as the Administrator determines are needed for the safe and efficient use of the airport by aircraft, considering the category of the airport and the type and volume of traffic using it:

(1) Land needed for installing approach lighting systems (ALS).

(2) In-runway lighting.

(3) High intensity runway lighting.

(4) Runway distance markers.

For the purposes of this section "approach lighting system (ALS)" is a standard configuration of aeronautical ground lights in the approach area to a runway or channel to assist a pilot in making an approach to the runway or channel.

(b) *Specific landing aid requirements.* The landing aids set forth in paragraphs (a) (1) through (4) of this section are required for the safe and efficient use of airports by aircraft in the following cases:

(1) Lands for installing approach lighting systems are required as part of a project if the installing of the components of the system on the airport is in an approved FAA budget, unless the sponsor has already acquired the land necessary for the system or is otherwise undertaking to acquire that land. If the sponsor is otherwise undertaking to acquire the land, the grant agreement for the project must obligate the sponsor to complete the acquisition within a time limit prescribed by the Administrator. The Administrator immediately notifies a sponsor when a budget is approved providing for installing an approach lighting system at the airport concerned.

(2) In-runway lighting is required as part of a project:

(i) If the project includes:

(*a*) Construction of a new runway designated by the FAA as an instrument landing runway for which the installation of an IFR precision approach system including ALS and ILS, has been programed by the FAA with funds then available therefor;

(*b*) An extension of 3,000 feet or more (usable for landing purposes) of the approach end of a designated instrument landing runway equipped, or programed by the FAA, with funds then available therefor, to be equipped, with an IFR precision approach system including ALS and ILS;

(*c*) Reconstruction of a designated instrument landing runway equipped, or programed by the FAA, with funds then available therefor, to be equipped with an IFR precision approach system including ALS and ILS, if the reconstruction requires the closing of the runway; or

(*d*) Any other airport development on an airport whose designated instrument landing runway is equipped, or programed by the FAA, with funds then available therefor, to be equipped with an IFR precision approach system including ALS and ILS; and

(ii) Only if a study of the airport shows that in-runway lighting is required for the safe and efficient use of the airport by aircraft, after the Administrator considers the following:

(*a*) The type and volume of flight activity;

(*b*) Other existing or planned navigational aids;

(*c*) Airport environmental factors such as local weather conditions and adjacent geographic profiles;

(*d*) Approach and departure paths;

(*e*) Effect on landing and takeoff minima; and

(*f*) In the case of projects under paragraph (b)(2)(i)(*d*) of this section, whether installing in-runway lighting requires closing the runway for so long a time that the adverse effect on safety of its closing would outweigh the contribution to safety that would be gained by the in-runway lights or whether it would unduly interfere with the efficiency of aircraft operations.

(3) High intensity runway edge lighting on the designated instrument landing runway is required as a part of a project whenever that runway is equipped or programed for the installation of an ILS and high intensity runway edge lights are not then installed on the runway or included in another project. A project for extending a runway that has high intensity runway edge lights on the existing runway requires, as a part of the project, the extension of the high intensity runway edge lights.

(4) Runway distance markers whose design standards have been approved and published by the FAA are required as a part of a project on a case-by-case basis if, after reviewing the pertinent facts and circumstances of the case, the Administrator determines that they are needed for the safe and efficient use of the airport by aircraft.

[Doc. No. 1329, 27 FR 12350, Dec. 13, 1962, as amended by Amdt. 151-3, 28 FR 12613, Nov. 27, 1963; Amdt. 151-33, 34 FR 9708, June 21, 1969]

§ 151.15 Federal-aid Airport Program: Policy affecting runway or taxiway remarking.

No project for developing or improving an airport may be approved for the Program unless it provides for runway or taxiway remarking if the present marking is obliterated by construction, alteration or repair work included in a FAAP project or by the required routing of construction equipment used therein.

[Amdt. 151-17, 31 FR 16524, Dec. 28, 1966]

Subpart B—Rules and Procedures for Airport Development Projects

AUTHORITY: 60 Stat. 170; sec. 10, 62 Stat. 453; secs. 313(a), 315, 601, 607, 72 Stat. 752; secs. 3, 4, 63 Stat. 700; 49 U.S.C. 1101-1119, 1159, 1354(a), 1355, 1421, 1427; 50 U.S.C. App. 1622(b), 1622(c), Federal Airport Act, as amended; sec. 6(c), Dept. of Transportation Act; 49 U.S.C. 1655(c); sec. 1.4(b)(1) of the regulations of the Office of the Secretary of Transportation, unless otherwise noted.

SOURCE: Docket No. 1329, 27 FR 12351, Dec. 13, 1962, unless otherwise noted.

EDITORIAL NOTE: For miscellaneous technical amendments to this Subpart B, see Amdt. 151-11, 31 FR 6686, May 5, 1966.

§ 151.21 Procedures: Application; general information.

(a) An eligible sponsor that desires to obtain Federal aid for eligible airport development must submit to the Area Manager of the area in which the sponsor is located (hereinafter in this part referred to as the "Area Manager"), a request on FAA Form 5100-3, accompanied by—

(1) The sponsor's written statement as to whether the proposed project involves the displacement and relocation of persons residing on land physically acquired or to be acquired for the project development; and

(2) The sponsor's written assurance, if the project involves displacement and relocation of such persons, that adequate replacement housing will be available or provided for (built, if necessary), without regard to their race, color, religion, sex, or national origin, before the execution of a grant agreement for the project.

(b) A proposed project is selected for inclusion in a program only if the sponsor has submitted a written assurance when required by paragraph (a)(2) of this section, or if the Administrator has determined that the project does not involve the displacement and relocation of persons residing on land to be physically acquired or to be acquired for the project development. If the Administrator selects a proposed project for inclusion in a program, a tentative allocation of funds is made for it and the sponsor is notified of the allocation. The tentative allocation may be withdrawn if the sponsor fails to submit an acceptable project application as provided in paragraph (c) of this section or fails to proceed diligently with the project, or if adequate replacement housing is not available or provided for in accordance with a written assurance when required by paragraph (a)(2) of this section.

(c) As soon as practicable after receiving notice of the tentative allocation, the sponsor must submit a project application on FAA Form 1624 to the Area Manager, without changing the language of the form, unless the change is approved in advance by the Administrator. In the case of a joint project, each sponsor executes only those provisions of the project application that apply to it. A sponsor who has executed a grant agreement for a project for the development of an airport under the Program, may, in the Administrator's discretion, submit additional project applications on FAA Form 1624 for further development of that airport.

(49 U.S.C. 1120, 1655(c); sec. 6(c), Dept. of Transportation Act; sec. 1.4(b)(1) of the regulations of the Office of the Secretary of Transportation; Federal Airport Act, as amended)

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962, as amended by Amdt. 151-11, 31 FR 6686, May 5, 1966; Amdt. 151-32, 34 FR 9617, June 19, 1969; Amdt. 151-39, 35 FR 5536, Apr. 3, 1970]

§ 151.23 Procedures: Application; funding information.

Each sponsor must state in its application that it has on hand, or show that it can obtain as needed, funds to pay all estimated costs of the proposed project that are not borne by the United States or by another sponsor. If any of the funds are to be furnished to a sponsor, or used to pay project costs on behalf of a sponsor, by a State agency or any other public agency that is not a sponsor of the project, that agency may, instead of the sponsor, submit evidence that the funds will be provided if the project is approved.

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962, as amended by Amdt. 151-34, 34 FR 12883, Aug. 8, 1969]

§ 151.24 Procedures: Application; information on estimated project costs.

(a) If any part of the estimated project costs consists of the value of donated land, labor, materials, or equipment, or of the value of a property interest in land acquired at a cost that (as represented by the sponsor) is not the actual cost or the amount of an award in eminent domain proceedings, the sponsor must so state in the application, indicating the nature of the donation or other transaction and the value it places on it.

(b) If, after the grant agreement is executed and before the final payment of the allowable project costs is made under § 151.63, it appears that the sponsor inadvertently or unknowingly failed to comply with paragraph (a) of this section as to any item, the Administrator—

(1) Makes or obtains an appraisal of the item, and if the appraised value is less than the value placed on the item in the project application, notifies the sponsor that it may, within a stated time, ask in writing for reconsideration of the appraisal and submit statements of pertinent facts and opinion; and

(2) Adjusts the U.S. share of the project costs to reflect any decrease in value of the item below that stated in the project application.

[Amdt. 151-34, 34 FR 12883, Aug. 8, 1969]

§ 151.25 Procedures: Application; information as to property interests.

(a) Each sponsor must state in its application all of the property interests that he holds in the lands to be developed or used as part of, or in connection with, the airport as it will be when the project is completed. Each project application contains a covenant on the part of the sponsor to acquire, before starting construction work, or within a reasonable time if not needed for the construction, property interests satisfactory to the Administrator in all the lands in which it does not hold those property interests at the time it submits the application. In the case of a joint project, any one or more of the sponsors may hold or acquire the necessary property interests. In such a case, each sponsor may show on its application only those property interests that it holds or is to acquire.

(b) Each sponsor of a project must send with its application a property map (designated as Exhibit A) or incorporate such a map by reference to one in a previous application that was approved. The sponsor must clearly identify on the map all property interests required in paragraph (a) of this section, showing prior and proposed acquisitions for which United States aid is requested under the project.

(c) For the purposes of paragraphs (a) and (b) of this section, the property interest that the sponsor must have or agree to obtain, is—

(1) Title free and clear of any reversionary interest, lien, easement, lease, or other encumbrance that, in the opinion of the Administrator, would create an undue risk that it might deprive the sponsor of possession or control, interfere with its use for public airport purposes, or make it impossible for the sponsor to carry out the agreements and covenants in the application;

(2) A lease of not less than 20 years granted to the sponsor by another public agency that has title as described in paragraph (c)(1) of this section, on terms that the Administrator considers satisfactory; or

(3) In the case of an offsite area an agreement, easement, leasehold, or other right or property interest that, in the Administrator's opinion, provides reasonable assurance that the sponsor will not be deprived of its right to use the land for the intended purpose during the period necessary to meet the requirements of the grant agreement.

(d) For the purposes of this section, the word "land" includes landing areas, building areas, runway clear zones, clearways and approach zones, and areas required for offsite construction, entrance roads, drainage, protection of approaches, installation of air navigation facilities, or other airport purposes.

§ 151.26 Procedures: Applications; compatible land use information; consideration of local community interest; relocation of displaced persons.

(a) Each sponsor must state in its application the action that it has taken to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations including landing and take-off of aircraft. The sponsor's statement must include information on—

(1) Any property interests (such as airspace easements or title to airspace) acquired by the sponsor to assure compatible land use, or to protect or control aerial approaches;

(2) Any zoning laws enacted or in force restricting the use of land adjacent to or in the vicinity of the airport, or assuring protection or control of aerial approaches, whether or not enacted by the sponsor; and

(3) Any action taken by the sponsor to induce the appropriate government authority to enact zoning laws restricting the use of land adjacent to or in the vicinity of the airport, or assuring protection or control of aerial approaches, when the sponsor lacks the power to zone the land.

(b) Each sponsor must submit with his application—

(1) A written statement—

(i) Specifying what consideration has been given to the interest of all communities in or near which the project is located; and

(ii) Containing the substance of any objection to, or approval of, the proposed project made known to the sponsor by any local individual, group or community; and

(2) A written statement showing that adequate replacement housing that is open to all persons, regardless of race, color, religion, sex, or national origin, is available and has been offered on the same nondiscriminatory basis to persons who have resided on land physically acquired or to be acquired for the project development and who will be displaced thereby.

[Amdt. 151-8, 30 FR 8039, June 23, 1965, as amended by Amdt. 151-17, 31 FR 16524, Dec. 28, 1966; Amdt. 151-39, 35 FR 5537, Apr. 3, 1970]

§ 151.27 Procedures: Application, plans, specifications, and appraisals.

(a) Except as provided in paragraph (b) of this section, each sponsor shall incorporate by reference in its project application the final plans and specifications, describing the items of airport development for which it requests United States aid. It must submit the plans and specifications with the application unless they were previously submitted or are submitted with that of another sponsor of the project.

(b) In special cases, the Administrator authorizes the postponement of the submission of final plans and specifications until a later date to be specified in the grant agreement, if the sponsor has submitted—

(1) An airport layout plan approved by the Administrator; and

(2) Preliminary plans and specifications in enough detail to identify all items of development included in the project, and prepared so as to provide for accomplishing the project in accordance with the master plan layout, the rules in Subparts B and C and applicable local laws and regulations.

(c) If the project involves acquiring a property interest in land by donation, or at a cost that (as represented by the sponsor) is not the actual cost or the amount of an award in eminent domain proceedings, the Administrator, before passing on the eligibility of the project makes or obtains an appraisal of the interest. If the appraised value is less than the value placed on the interest by the sponsor (§ 151.23), the Administrator notifies the sponsor that he may within a stated time, ask in writing for reconsideration of the appraisal and submit statements of pertinent facts and opinion.

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962 as amended by Amdt. 151-8, 30 FR 8039, June 23, 1965; Amdt. 151-17, 31 FR 16524, Dec. 28, 1966]

§ 151.29 Procedures: Offer, amendment, and acceptance.

(a) Upon approving a project, the Administrator makes an offer to the sponsor to pay the United States share of the allowable project costs. The offer states a definite amount as the maximum obligation of the United States, and is subject to change or withdrawal by the Administrator, in his discretion, at any time before it is accepted.

(b) If, before the sponsor accepts the offer, it is determined that the maximum obligation of the United States stated in the offer is not enough to pay the United States share of the allowable project costs, the sponsor may request an increase in the amount in the offer, through the Area Manager.

(c) An official of the sponsor must accept the offer for the sponsor within the time prescribed in the offer, and in the required number of counterparts, by signing it in the space provided. The signing official must have been authorized to sign the acceptance by a resolution or ordinance adopted by the sponsor's governing body. The resolution or ordinance must, as appropriate under the local law—

(1) Set forth the terms of the offer at length; or

(2) Have a copy of the offer attached to the resolution or ordinance and incorporated into it by reference.

The sponsor must attach a certified copy of the resolution to each executed copy of an accepted offer or grant agreement that it is required to send to the Area Manager.

§ 151.31 Procedures: Grant agreement.

(a) An offer by the Administrator, and acceptance by the sponsor, as set forth in § 151.29, constitute a grant agreement between the sponsor and the United States. Except as provided in § 151.41(c)(3), the United States does not pay, and is not obligated to pay, any part of the project costs that have been or may be incurred, before the grant agreement is executed.

(b) The Administrator and the sponsor may agree to a change in a grant agreement if—

(1) The change does not increase the maximum obligation of the United States under the grant agreement by more than 10 percent;

(2) The change provides only for airport development that meets the requirements of Subparts B and C; and

(3) The change does not prejudice the interests of the United States.

(c) When a change is agreed to, the Administrator issues a supplemental agreement incorporating the change. The sponsor must accept the supplemental agreement in the manner provided in § 151.29(c).

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962, as amended by Amdt. 151-8, 30 FR 8040, June 23, 1965]

§ 151.33 Cosponsorship and agency.

(a) Any two or more public agencies that desire to participate either in accomplishing development under a project or in maintaining or operating the airport, may cosponsor it if they meet the requirements of Subparts B and C, including—

(1) The eligibility requirements of § 151.37; and

(2) The submission of a single project application, executed by each sponsor, clearly stating the certifications, representations, warranties, and obligations made or assumed by each, or a separate application by each that does not meet all the requirements of Subparts B and C if in the Administrator's opinion, the applications collectively meet the requirements of Subparts B and C as applied to a project with a single sponsor.

(b) A public agency that desires to participate in a project only by contributing funds to a sponsor need not become a sponsor or an agent of the sponsor, as provided in this section. However, any funds that it contributes are considered as funds of the sponsor for the purposes of the Federal Airport Act and this part.

(c) If the sponsors of a joint project are not each willing to assume, jointly and severally, the obligations that Subparts B and C requires a sponsor to assume, they must send a true copy of an agreement between them, satisfactory to the Administrator, to be incorporated into the grant agreement. Each agreement must state—

(1) The responsibilities of each sponsor to the others with respect to accomplishing the proposed development and operating and maintaining the airport;

(2) The obligations that each will assume to the United States; and

(3) The name of the sponsor or sponsors who will accept, receipt for, and disburse grant payments.

If an offer is made to the sponsors of a joint project, as provided in § 151.29, it contains a specific condition that it is made in accordance with the agreement between the sponsors (and the agreement is incorporated therein by reference) and that, by accepting the offer, each sponsor assumes only its respective obligations as set forth in the agreement.

(d) A public agency may, if it is authorized by local law, act as agent of the public agency that is to own and operate the airport, with or without participating financially and without becoming a sponsor. The terms and conditions of the agency and the agent's authority to act for the sponsor must be set forth in an agency agreement that is satisfactory to the Administrator. The sponsor must submit a true copy of the agreement with the project application. Such an agent may accept, on behalf of the sponsor, an offer made under § 151.29, only if that acceptance has been specifically and legally authorized by the sponsor's governing body and the authority is specifically set forth in the agency agreement.

(e) When the cosponsors of an airport are not located in the same area, they must submit a joint request to the Area Manager of the area in which the airport development will be located.

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962, as amended by Amdt. 151-8, 30 FR 8040, June 23, 1965; Amdt. 151-11, 31 FR 6686, May 5, 1966]

§ 151.35 Airport development and facilities to which Subparts B and C apply.

(a) Subparts B and C applies to the following kinds of airport development:

(1) Any work involved in constructing, improving, or repairing a public airport or part thereof, including the constructing, altering, or repairing of only those buildings or parts thereof that are intended to house facilities or activities directly related to the safety of persons at the airport.

(2) Removing, lowering, relocating, marking, and lighting of airport hazards as defined in § 151.39(b).

(3) Acquiring land or an interest therein, or any easement through or other interest in air space, that is necessary to allow any work covered by paragraph (a)(1) or (2) of this section, or to remove or mitigate, or prevent or limit the establishment of, airport hazards as defined in § 151.39(b).

It does not apply to the constructing, altering, or repair of airport hangars or public parking facilities for passenger automobiles.

(b) The airport facilities to which Subparts B and C applies are those structures, runways, or other items, on or at an airport, that are—

(1) Used or intended to be used, in connection with the landing, takeoff, or maneuvering of aircraft, or for or in connection with operating and maintaining the airport itself; or

(2) Required to be located at the airport for use by the users of its aeronautical facilities or by airport operators, concessionaires, and other users of the airport in connection with providing services or commodities to the users of those aeronautical facilities.

(c) For the purposes of Subparts B and C, "public airport" means an airport used for public purposes, under the control of a public agency named in § 151.37(a), with a publicly owned landing area.

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962, as amended by Amdt. 151-8, 30 FR 8040, June 23, 1965]

§ 151.37 Sponsor eligibility.

To be eligible to apply for an individual or joint project for development with respect to a particular airport a sponsor must—

(a) Be a public agency, which includes for the purposes of this part only, a State, the District of Columbia, Puerto Rico, the Virgin Islands, Guam or an agency of any of them; a municipality or other political subdivision; a tax-supported organization; or the United States or an agency thereof;

(b) Be legally, financially, and otherwise able to—

(1) Make the certifications, representations, and warranties in the application form prescribed in § 151.67(a);

(2) Make, keep, and perform the assurances, agreements, and covenants in that form; and

(3) Meet the other applicable requirements of the Federal Airport Act and Subparts B and C;

(c) Have, or be able to obtain, enough funds to meet the requirements of § 151.23; and

(d) Have, or be able to obtain, property interests that meet the requirements of § 151.25(a).

For the purpose of paragraph (a) of this section, the United States, or an agency thereof, is not eligible for a project under Subparts B and C, unless the project—

(1) Is located in Puerto Rico, the Virgin Islands, or Guam;

(2) Is in or is in close proximity to a national park, a national recreation area, or a national monument; or

(3) Is in a national forest or a special reservation for United States purposes.

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962, as amended by Amdt. 151-8, 30 FR 8040, June 23, 1965]

§ 151.39 Project eligibility.

(a) A project for construction or land acquisition may not be approved under Subparts B and C unless—

(1) It is an item of airport development described in § 151.35(a);

(2) The airport development is within the scope of the current National Airport Plan;

(3) The airport development is, in the opinion of the Administrator, reasonably necessary to provide a needed civil airport facility;

(4) The Administrator is satisfied that the project is reasonably consistent with existing plans of public agencies for the development of the area in which the airport is located and will contribute to the accomplishment of the purposes of the Federal-aid Airport Program;

(5) The Administrator is satisfied, after considering the pertinent information including the sponsor's statements required by § 151.26(b), that—

(i) Fair consideration has been given to the interest of all communities in or near which the project is located; and

(ii) Adequate replacement housing that is open to all persons, regardless of race, color, religion, sex, or national origin, is available and has been offered on the same nondiscriminatory basis to persons who have resided on land physically acquired or to be acquired for the project development and have been or will be displaced thereby;

(6) The project provides for installing such of the landing aids specified in section 10(d) of the Federal Airport Act (49 U.S.C. 1109(d)) as the Administrator considers are needed for the safe and efficient use of the airport by aircraft, based on the category of the airport and the type and volume of its traffic.

(b) Only the following kinds of airport development described in § 151.35(a) are eligible to be included in a project under Subparts B and C:

(1) Preparing all or part of an airport site, including clearing, grubbing filling and grading.

(2) Dredging of seaplane anchorages and channels.

(3) Drainage work, on or off the airport or airport site.

(4) Constructing, altering, or repairing airport buildings or parts thereof to the extent that it is covered by § 151.35(a).

(5) Constructing, altering, or repairing runways, taxiways, and aprons, including—

(i) Bituminous resurfacing of pavements with a minimum of 100 pounds of plant-mixed material for each square yard;

(ii) Applying bituminous surface treatment on a pavement (in accordance with FAA Specification P-609), the existing surface of which consists of that kind of surface treatment; and

(iii) Resealing a runway that has been substantially extended or partially reconstructed, if that resealing is necessary for the uniform color and appearance of the runway.

(6) Fencing, erosion control, seeding and sodding of an airport or airport site.

(7) Installing, altering, or repairing airport markers and runway, taxiway and apron lighting facilities and equipment.

(8) Constructing, altering, or repairing entrance roads and airport service roads.

(9) Constructing, installing, or connecting utilities, either on or off the airport or airport site.

(10) Removing, lowering, relocating marking, or lighting any airport hazard.

(11) Clearing, grading, and filling to allow the installing of landing aids.

(12) Relocating structures, roads, and utilities necessary to allow eligible airport development.

(13) Acquiring land or an interest therein, or any easement through or other interest in airspace, when necessary to—

(i) Allow other airport development to be made, whether or not a part of the Federal-aid Airport Program;

(ii) Prevent or limit the establishment of airport hazards;

(iii) Allow the removal, lowering, relocation, marking, and lighting of existing airport hazards;

(iv) Allow the installing of landing aids; or

(v) Allow the proper use, operation, maintenance, and management of the airport as a public facility.

(14) Any other airport development described in § 151.35(a) that is specifically approved by the Administrator.

For the purposes of paragraph (b)(10) of this section, an airport hazard is any structure or object of natural growth located on or in the vicinity of a public airport, or any use of land in the vicinity of the airport, that obstructs the airspace needed for the landing or takeoff of aircraft or is otherwise hazardous to the landing or takeoff of aircraft. For the purposes of paragraph (b)(13) of this section, land acquisition includes the acquiring of land that is already developed as a private airport and the structures, fixtures, and improvements that are a part of realty (other than hangars, other ineligible structures and parts thereof, fixtures, and improvements).

(c) A project for acquiring land that has been or will be donated to the sponsor is not eligible for inclusion in the Federal-aid Airport Program, unless the project also includes other items of airport development that would require a sponsor's contribution equal to or more than the United States share of the value of the donated land as appraised by the Administrator.

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962, as amended by Amdt. 151-8, 30 FR 8040, June 23, 1965; Amdt. 151-17, 31 FR 16524, Dec. 28, 1966; Amdt. 151-37, 35 FR 5112, Mar. 26, 1970; Amdt. 151-39, 35 FR 5537, Apr. 3, 1970]

§ 151.41 Project costs.

(a) For the purposes of Subparts B and C, project costs consist of any costs involved in accomplishing a project, including those of—

(1) Making field surveys;

(2) Preparing plans and specifications;

(3) Accomplishing or procuring the accomplishing of the work;

(4) Supervising and inspecting construction work;

(5) Acquiring land, or an interest therein, or any easement through or other interest in airspace; and

(6) Administrative and other incidental costs incurred specifically in connection with accomplishing a project, and that would not have otherwise been incurred.

(b) The costs described in paragraph (a) of this section, including the value of land, labor, materials, and equipment donated or loaned to the sponsor and appropriated to the project by the sponsor, are eligible for consideration as to their allowability, except for—

(1) That part of the cost of rehabilitation or repair for which funds have been appropriated under section 17 of the Federal Airport Act (49 U.S.C. 1116);

(2) That part of the cost of acquiring an existing private airport that represents the cost of acquiring passenger automobile parking facilities, buildings to be used as hangars, living quarters, or for nonairport purposes, at the airport, and those buildings or parts of buildings the construction of which is not airport development within the meaning of § 151.35(a);

(3) The cost of materials and supplies owned by the sponsor or furnished from a source of supply owned by the sponsor if—

(i) Those materials and supplies were used for airport development before the grant agreement was executed; or

(ii) The cost is not supported by proper evidence of quantity and value;

(4) The cost of nonexpendable machinery, tools, or equipment owned by the sponsor and used under a project by the sponsors force account, except to the extent of the fair rental value of that machinery, tools, or equipment for the period it is used on the project;

(5) The costs of general area, urban, or statewide planning of airports, as distinguished from planning a specific project;

(6) The value of any land, including improvements, donated to the sponsor by another public agency; and

(7) Any costs incurred in connection with raising funds by the sponsor, including interest and premium charges and administrative expenses involved in conducting bond elections and in the sale of bonds.

(c) To be an allowable project cost, for the purposes of computing the amount of a grant, an item that is paid or incurred must, in the opinion of the Administrator—

(1) Have been necessary to accomplish airport development in conformity with the approved plans and specifications for an approved project and with the terms of the grant agreement for the project;

(2) Be reasonable in amount (or be subject to partial disallowance under section 13(a)(3) of the Federal Airport Act (49 U.S.C. 1112(a)(3));

(3) Have been incurred after the date the grant agreement was executed, except that costs of land acquisition, field surveys, planning, preparing plans and specifications, and administrative and incidental costs, may be allowed even though they were incurred before that date, if they were incurred after May 13, 1946; and

(4) Be supported by satisfactory evidence.

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962, as amended by Amdt. 151-8, 30 FR 8040, June 23, 1965; Amdt. 151-14, 31 FR 11747, Sept. 8, 1966]

§ 151.43 United States share of project costs.

(a) The United States share of the allowable costs of a project is stated in the grant agreement for the project, to be paid from appropriations made under the Federal Airport Act.

(b) Except as provided in paragraphs (c) and (d) of this section and in Subpart C of this part, the United States share of the costs of an approved project for airport development (regardless of its size or location) is 50 percent of the allowable costs of the project.

(c) The U.S. share of the costs of an approved project for airport development in a State in which the unappropriated and unreserved public lands and nontaxable Indian lands (individual and tribal) is more than 5 percent of its total land, is the percentage set forth in the following table:

State	Percent
Alaska	62.50
Arizona	60.80
California	53.72
Colorado	52.98
Idaho	55.80
Montana	52.99
Nevada	62.50
New Mexico	56.14
Oregon	55.64
South Dakota	52.53
Utah	60.65
Washington	51.53
Wyoming	56.33

(d) The United States share of the costs of an approved project, representing the costs of any of the following, is 75 percent:

(1) The costs of installing high intensity runway edge lighting on a designated instrument landing runway or other runway with an approved straight-in approach procedure.

(2) The costs of installing in-runway lighting (touchdown zone lighting system, and centerline lighting system).

(3) The costs of installing runway distance markers.

(4) The costs of acquiring land, or a suitable property interest in land or in or over water, needed for installing operating, and maintaining an ALS (as described in § 151.13).

(5) The costs of any project in the Virgin Islands.

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962 as amended by Amdt. 151-17, 31 FR 16524, Dec. 28, 1966; Amdt. 151-20, 32 FR 17471; Dec. 6, 1967; Amdt. 151-35, 34 FR 13699, Aug. 27, 1969; Amdt. 151-36, 34 FR 19501 Dec. 10, 1969]

§ 151.45 Performance or construction work: General requirements.

(a) All construction work under a project must be performed under contract, except in a case where the Administrator determines that the project, or a part of it, can be more effectively and economically accomplished on a force account basis by the sponsor or by another public agency acting for or as agent of the sponsor.

(b) Each contract under a project must meet the requirements of local law.

(c) No sponsor may issue any change order under any of its construction contracts or enter into a supplemental agreement unless three copies of that order or agreement have been sent to and approved by the Area Manager. §§ 151.47 and 151.49 apply to supplemental agreements as well as to original contracts.

(d) This section and §§ 151.47 through 151.49 do not apply to contracts with the owners of airport hazards, (as described in § 151.39(b)), buildings, pipe lines, power lines, or other structures or facilities, for installing, extending, changing, removing, or relocating that structure or facility. However, the sponsor must obtain the approval of the Area Manager before entering into such a contract.

(e) No sponsor may allow a contractor or subcontractor to begin work under a project until—

(1) The sponsor has furnished three conformed copies of the contract to the Area Manager; and

(2) The Area Manager agrees to the issuance of a notice to proceed with the work to the contractor. However, the Area Manager does not agree to the issuance of such a notice unless he is satisfied that adequate replacement housing is available and has been offered to affected persons, as required for project eligibility by § 151.39(a)(5).

(f) Except when the Area Manager determines that the sponsor has previously demonstrated satisfactory engineering and construction supervision and inspection, no sponsor may allow a contractor or subcontractor to begin work, nor may the sponsor begin force account work, until the sponsor has notified the Area Manager in writing that engineering and construction supervision and inspection have been arranged to insure that construction will conform to FAA approved plans and specifications, and that the sponsor has caused a review to be made of the qualifications of personnel who will be performing such supervision and inspection and is satisfied that they are qualified to do so.

[Doc. No. 1329, 27 FR 12351, Dec. 1[illegible], 1962, as amended by Amdt. 151-31, 34 FR 4885, Mar. 6, 1969; Amdt. 151-39, 35 FR 5537, Apr. 3, 1970]

§ 151.47 Performance of construction work: Letting of contracts.

(a) *Advertising required; exceptions.* Unless the Administrator approves another method for use on a particular airport development project, each contract for construction work on a project in the amount of more than $2,000 must be awarded on the basis of public advertising and open competitive bidding under the local law applicable to the letting of public contracts. Any oral or written agreement or understanding between a sponsor and another public agency that is not a sponsor of the project, under which that public agency undertakes construction work for or as agent of the sponsor, is not considered to be a construction contract for the purposes of this section, or §§ 151.45, 151.49, and 151.51.

(b) *Advertisement; conditions and contents.* There may be no advertisement for bids on, or negotiation of, a construction contract until the Administrator has approved the plans and specifications. The advertisement shall inform the bidders of the contract and reporting provisions required by § 151.54. Unless the estimated contract price or construction cost is $2,000 or less, there may be no advertisement for bids or negotiation until the Administrator has given the sponsor a copy of a decision of the Secretary of Labor establishing the minimum wage rates for skilled and unskilled labor under the proposed contract. In each case, a copy of the wage determination decision must be set forth in the initial invitation for bids or proposed contract or incorporated therein by reference to a copy set forth in the advertised or negotiated specifications.

(c) *Procedure for the Secretary of Labor's wage determinations.* At least 60 days before the intended date of advertising or negotiating under paragraph (b) of this section, the sponsor shall send to the Area Manager, completed Department of Labor Form DB-11, with only the classifications needed in the performance of the work checked. General entries (such as "entire schedule" or "all applicable classifications") may not be used. Additional necessary classifications not on the form may be typed in the blank spaces or on an attached separate list. A classification that can be fitted into classifications on the form, or a classification that is not generally recognized in the area or in the industry, may not be used. Except in areas where the wage patterns are clearly established, the Form must be accompanied by any available pertinent wage payment or locally prevailing fringe benefit information.

(d) *Use and effectiveness of the Secretary of Labor's wage determinations.* (1) Wage determinations are effective only for 120 days from the date of the determinations. If it appears that a determination may expire between bid opening and award, the sponsor shall so advise the FAA as soon as possible. If he wishes a new request for wage determination to be made and if any pertinent circumstances have changed, he shall submit a new Form DB-11 and accompanying information. If he claims that the determination expires before award and after bid opening due to unavoidable circumstances, he shall submit proof of the facts which he claims support a finding to that effect.

(2) The Secretary of Labor may modify any wage determination before the award of the contract or contracts for which it was sought. If the proposed contract is awarded on the basis of public advertisement and open competitive bidding, any modification that the FAA receives less than 10 days before the opening of bids is not effective, unless the Administrator finds that there is reasonable time to notify bidders. A modification may not continue in effect beyond the effective period of the wage determination to which it relates. The Administrator sends any modification to the sponsor as soon as possible. If the modification is effective, it must be incorporated in the invitation for bids, by issuing an addendum to the specifications or otherwise.

(e) *Requirements for awarding construction contracts.* A sponsor may not award a construction contract without the written concurrence of the Administrator (through the Area Manager) that the contract prices are reasonable and that the contract conforms to the sponsor's grant agreement with the United States. A sponsor that awards contracts on the basis of public advertising and open competitive bidding, shall, after the bids are opened, send a tabulation of the bids and its recommendations for award to the Area Manager. The allowable project costs of the work, on which the Federal participation is computed, may not be more than the bid of the lowest responsible bidder. The sponsor may not accept a bid by a contractor whose name appears on the current list of ineligible contractors published by the Comptroller General of the United States under § 5.6(b) of Title 29 of the regulations of the Secretary of Labor (29 CFR Part 5), or a bid by any firm, corporation, partnership, or association in which that contractor has a substantial interest.

(f) *Secretary of Labor's interpretations apply.* Where applicable by their terms, the regulations of the Secretary of Labor (29 CFR 5.20-5.32) interpreting the fringe benefit provisions of the Davis-Bacon Act apply to this section.

[Amdt. 151-6, 29 FR 18001, Dec. 18, 1964]

§ 151.49 Performance of construction work: Contract requirements.

(a) *Contract provisions.* In addition to any other provisions necessary to ensure completion of the work in accordance with the grant agreement, each sponsor entering into a construction contract for an airport development project shall insert in the contract the provisions required by the Secretary of Labor, as set forth in Appendix H of this part. The Director, Airports Service, may amend any provision in Appendix H from time to time to accord with rule-making action of the Secretary of Labor. The provisions in the following paragraphs also must be inserted in the contract:

(1) *Federal Aid to Airport Program Project.* The work in this contract is included in Federal-aid Airport Project No. ———which is being undertaken and accomplished by the [insert sponsor's name] in accordance with the terms and conditions of a grant agreement between the [insert sponsor's name] and the United States, under the Federal Airport Act (49 U.S.C. 1101) and Part 151 of the Federal Aviation Regulations (14 CFR Part 151), pursuant to which the United States has agreed to pay a certain percentage of the costs of the project that are determined to be allowable project costs under that Act. The United States is not a party to this contract and no reference in this contract to the FAA or any representative thereof, or to any rights granted to the FAA or any representative thereof, or the United States, by the contract, makes the United States a party to this contract.

(2) *Consent to assignment.* The contractor shall obtain the prior written consent of the [insert sponsor's name] to any proposed assignment of any interest in or part of this contract.

(3) *Convict labor.* No convict labor may be employed under this contract.

(4) *Veterans' preference.* In the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to qualified individuals who have served in the military service of the United States (as defined in section 101(1) of the Soldiers' and Sailors' Civil Relief Act of 1940) and have been honorably discharged from that service, except that preference may be given only where that labor is available locally and is qualified to perform the work to which the employment relates.

(5) *Withholding: Sponsor from contractor.* Whether or not payments or advances to the [insert sponsor's name] are withheld or suspended by the FAA, the [insert sponsor's name] may withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics employed by the contractor or any subcontractor on the work the full amount of wages required by this contract.

(6) *Nonpayment of wages.* If the contractor or subcontractor fails to pay any laborer or mechanic employed or working on the site of the work any of the wages required by this contract the [insert sponsor's name] may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment or advance of fu[illegible]til the violations cease.

(7) *FAA inspection* [illegible]. The contractor shall allow a[illegible]zed representative of the FAA to [illegible] and review any work or materials us[illegible]e performance of this contract.

(8) *Subcontracts.* The contractor shall insert in each of his subcontracts the provisions contained in paragraphs [insert designations of [illegible] paragraphs of contract corresponding to paragraphs (1), (3), (4), (5), (6) and (7) of this paragraph], and also a clause requiring the subcontractors to include these provisions in any lower tier subcon-

tracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

(9) *Contract termination.* A breach of paragraphs [insert designation of 3 paragraphs corresponding to paragraphs (6), (7) and (8) of this paragraph] may be grounds for termination of the contract.

(b) *Exemption of certain contracts.* Appendix H to this part and paragraph (a)(5) of this section do not apply to prime contracts of $2,000 or less.

(c) *Adjustment in liquidated damages.* A contractor or subcontractor who has become liable for liquidated damages under paragraph G of Appendix H and who claims that the amount administratively determined as liquidated damages under section 104(a) of the Contract Work Hours Standards Act is incorrect or that he violated inadvertently the Contract Work Hours Standards Act notwithstanding the exercise of due care, may—

(1) If the amount determined is more than $100, apply to the Administrator for a recommendation to the Secretary of Labor that an appropriate adjustment be made or that he be relieved of liability for such liquidated damages; or

(2) If the amount determined is $100 or less, apply to the Administrator for an appropriate adjustment in liquidated damages or for release from liability for the liquidated damages.

(d) *Corrected wage determinations.* The Secretary of Labor corrects any wage determination included in any contract under this section whenever the wage determination contains clerical errors. A correction may be made at the Administrator's request or on the initiative of the Secretary of Labor.

(e) *Secretary of Labor's interpretations apply.* Where applicable by their terms, the regulations of the Secretary of Labor (29 CFR 5.20-5.32) interpreting the "fringe benefit provisions" of the Davis-Bacon Act apply to the contract provisions in Appendix H, and to this section.

[Amdt. 151-6, 29 FR 18001, Dec. 18, 1964, as amended by Amdt. 151-7, 30 FR 7484, June 6, 1965]

§ 151.51 Performance of construction work: Sponsor force account.

(a) Before undertaking any force account construction work, the sponsor (or any public agency acting as agent for the sponsor) must obtain the written consent of the Administrator through the Area Manager. In requesting that consent, the sponsor must submit—

(1) Adequate plans and specifications showing the nature and extent of the construction work to be performed under that force account;

(2) A schedule of the proposed construction and of the construction equipment that will be available for the project;

(3) Assurance that adequate labor, material, equipment, engineering personnel, as well as supervisory and inspection personnel as required by § 151.45(f), will be provided; and

(4) A detailed estimate of the cost of the work, broken down for each class of costs involved, such as labor, materials, rental of equipment, and other pertinent items of cost.

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962, as amended by Amdt. 151-17, 31 FR 16525, Dec. 28, 1966; Amdt. 151-31, 34 FR 4885, Mar. 6, 1969]

§ 151.53 Performance of construction work: Labor requirements.

A sponsor who is required to include in a construction contract the labor provisions required by § 151.49 shall require the contractor to comply with those provisions and shall cooperate with the FAA in effecting that compliance. For this purpose the sponsor shall—

(a) Keep, and preserve, for a three-year period beginning on the date the contract is completed, each affidavit and payroll copy furnished by the contractor, and make those affidavits and copies available to the FAA, upon request, during that period;

(b) Have each of those affidavits and payrolls examined by its resident engineer (or any other of its employees or agents who are qualified to make the necessary determinations), as soon as possible after receiving it, to the extent necessary to determine whether the contractor is complying with the labor provisions required by § 151.49 and particularly with respect to whether the contractor's employees are correctly classified;

(c) Have investigations made during the performance of work under the contract, to the extent necessary to determine whether the contractor is complying with those labor provisions, particularly with respect to whether the contractor's employees are correctly classified, including in the investigations, interviews with employees and examinations of payroll information at the work site by the sponsor's resident engineer (or any other of its employees or agents who are qualified to make the necessary determinations); and

(d) Keep the Area Manager fully advised of all examinations and investigations made under this section, all determinations made on the basis of those examinations and investigations, and all efforts made to obtain compliance with the labor provisions of the contract.

For the purposes of paragraph (c) of this section, the sponsor shall give priority to complaints of alleged violations, and shall treat as confidential any written or oral statements made by any employee. The sponsor may not disclose an employee's statement to a contractor without the employee's consent.

§ 151.54 Equal employment opportunity requirements: Before July 1, 1968.

In conformity with Executive Order 11246 of September 24, 1965 (30 FR 12319, 3 CFR, 1965 Supp., p. 167) the regulations of the former President's Committee on Equal Employment Opportunity, 41 CFR Part 60-1 (28 FR 9812, 11305), as adopted "to the extent not inconsistent with Executive Order 11246" by the Secretary of Labor ("Transfer of Functions," Oct. 19, 1965, 30 FR 13441), are incorporated by reference into Subparts B and C of this part as set forth below. They are referred to in this section by section numbers of Part 60-1 of Title 41.

(a) *Equal employment opportunity requirements.* There are hereby incorporated by reference into Subparts B and C, as requirements, the provisions of § 60-1.3(b)(1). The FAA is primarily responsible for the sponsor's compliance.

(b) *Equal employment opportunity requirements in construction contracts.* The sponsor shall cause the "equal opportunity clause" in § 60-1.3(b)(1) to be incorporated into all prime contracts and subcontracts as required by § 60-1.3(c).

(c) *Reporting requirements for contractors and subcontractors.* The sponsor shall cause the filing of compliance reports by contractors and subcontractors as provided in § 60-1.6(a) and the furnishing of such other information as may be required under that provision.

(d) *Bidders' reports.* (1) The sponsor shall include in his invitations for bids or negotiations for contracts, and shall require his contractors to include in their invitations for bids or negotiations for subcontracts, the following provisions based on § 60-1.6(b)(1):

> Each bidder, prospective contractor or proposed subcontractor shall state as an initial part of the bid or negotiations of the contract whether he has participated in any previous contract or subcontract subject to the equal opportunity clause and, if so, whether he has filed with the Office of Federal Contract Compliance in the United States Department of Labor or the contracting or administering agency all compliance reports due under applicable instructions. In any case in which a bidder or prospective contractor or proposed subcontractor who has participated in a previous contract or subcontract subject to the equal opportunity clause has not filed a compliance report due under applicable instructions, such bidder, prospective contractor or proposed subcontractors shall submit a compliance report prior to the award of the proposed contract or subcontract. When a determination has been made to award a contract to a specific contractor, such contractor shall, prior to award, furnish such other pertinent information regarding his own employment policies and practices as well as those of his proposed subcontractors as the FAA, the sponsor, or the Director of the Office of Federal Contract compliance may require.

(2) The sponsor or his contractors shall give express notice of the requirements of this paragraph (d) in all invitations for bids or negotiations for contracts.

(e) *Enforcement.* The FAA conducts compliance reviews, handles complaints and, where appropriate, con ducts hearings and imposes, or recommends to the Office of Federal Contract Compliance, sanctions, as provided in Subpart B—General Enforcement; Complaint Procedure of Part 60-1.

(f) *Exempted contracts.* Except for subcontracts for the performance of construction work at the site of construction, the requirements of this section do not apply to subcontracts below the second tier (§ 60-1.3(c)). The requirements of this section do not apply to contracts and subcontracts exempted by § 60-1.4.

(g) *Meaning of terms.* The term "applicant" in the provisions of Part 60-1 incorporated by reference in this section means the sponsor, except where Part 60-1 refers to an applicant for employment, and the term "administering agency" therein means the FAA.

(h) *Applicability to existing agreements and contracts.* This section applies to grant agreements made after December 20, 1964, and before July 1, 1968. Except as provided in § 151.54A(b), it applies to contracts and subcontracts as defined in § 60-1.2 (i) and (k) of Title 41 made in accordance with a grant agreement to which this section applies.

(E.O. 11246, 30 FR 13441, 31 FR 6921; sec. 307, 72 Stat. 752, 49 U.S.C. 1348)

[Amdt. 151-5, 29 FR 15569, Nov. 20, 1964, as amended by Amdt. 151-8, 30 FR 8040, June 23, 1965; Amdt. 151-12, 31 FR 10261, July 29, 1966; Amdt. 151-23, 33 FR 9543, June 29, 1968]

§ 151.54a Equal employment opportunity requirements: After June 30, 1968.

(a) *Incorporation by reference.* There are hereby incorporated by reference into this part the regulations issued by the Secretary of Labor on May 21, 1968, and published in the FEDERAL REGISTER on May 28, 1968 (41 CFR Part 60-1, 33 FR 7804), except for the following provisions:

(1) Paragraph (a), "Government contracts", of § 60-1.4, "Equal opportunity clause".

(2) Section 60-1.6, "Duties of agencies".

(b) *Applicability and effectiveness.* The regulations incorporated by reference in paragraph (a) of this section apply to grant agreements made after June 30, 1968. They also apply to contracts, as defined in § 60-1.3(f) of Title 41, entered into under any grant agreement made before or after that date, as provided in § 60-1.47 of Title 41.

(Sec. 307, 72 Stat. 752, 49 U.S.C. 1348)

[Amdt. 151-23, 33 FR 9543, June 29, 1968]

§ 151.55 Accounting and audit.

(a) Each sponsor shall establish and maintain, for each individual project, an adequate accounting record to allow appropriate personnel of the FAA to determine all funds received (including funds of the sponsor and funds received from the United States or other sources), and to determine the allowability of all incurred costs of the project. The sponsor shall segregate and group project costs so that it can furnish, on due notice, cost information in the following cost classifications:

(1) Purchase price or value of land.

(2) Incidental costs of land acquisition.

(3) Costs of contract construction.

(4) Costs of force account construction.

(5) Engineering costs of plans and designs.

(6) Engineering costs of supervision and inspection.

(7) Other administrative costs.

(b) The sponsor shall obtain and retain in its files for a period of three years after the date of the final grant payment, documentary evidence such as invoices, cost estimates, and payrolls supporting each item of project costs.

(c) The sponsor shall retain, for a period of three years after the date of the final grant payment, evidence of all payments for items of project costs including vouchers, cancelled checks or warrants, and receipts for cash payments.

(d) The sponsor shall allow the Administrator and the Comptroller General of the United States, or an authorized representative of either of them, access to any of its books, documents, papers, and records that are pertinent to grants received under the Federal-aid Airport Program for the purposes of accounting and audit. Appropriate FAA personnel may make progress audits at any time during the project, upon notice to the sponsor. If work is suspended on the project for an appreciable period of time, an audit will be made before any semi-final payment is made. In each case an audit is made before the final payment.

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962, as amended by Amdt. 151-8, 30 FR 8040, June 23, 1965]

§ 151.57 Grant payments: General.

(a) An application for a grant payment is made on FAA Form 5100-6, accompanied by—

(1) A summary of project costs on Form FAA-1630;

(2) A periodic cost estimate on Form FAA-1629 for each contract representing costs for which payment is requested; and

(3) Any supporting information, including appraisals of property interests, that the FAA needs to determine the allowability of any costs for which payment is requested.

(b) Contractor's certifications. Each application that involves work performed by a contractor must contain, in the contractor's certification in the periodic cost estimate, a statement that "there has been full compliance with all labor provisions included in the contract identified above and in all subcontracts made under that contract", and, in the case of a substantial dispute as to the nature of the contractor's or a subcontractor's obligation under the labor provisions of the contract or a subcontract, and additional phrase "except insofar as a substantial dispute exists with respect to these provisions".

(c) If a contractor or subcontractor fails or refuses to comply with the labor provisions of the contract with the sponsor, further grant payments to the sponsor are suspended until the violations stop, until the Administrator determines the allowability of the project costs to which the violations related, or, to the extent that the violations consist of underpayments to labor, until the sponsor furnishes satisfactory assurances to the FAA that restitution has been or will be made to the affected employees.

(d) If, upon final determination of the allowability of all project costs of a project, it is found that the total of grant payments to the sponsor was more than the total United States share of the allowable costs of the project, the sponsor shall promptly return the excess to the FAA.

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962, as amended by Amdt. 151-4, 29 FR 11336, Aug. 6, 1964; Amdt. 151-8, 30 FR 8040, June 23, 1965; Amdt. 151-17, 31 FR 16525, Dec. 28, 1966; Amdt. 151-32, 34 FR 9617, June 19, 1969]

§ 151.59 Grant payments: Land acquisition.

If an approved project includes land acquisition as an item of airport development, the sponsor may, at any time after executing the grant agreement and after title evidence has been approved by the Administrator for the property interest for which payment is requested, apply to the FAA, through the Area Manager, for payment of the United States share of the allowable project costs of the acquisition, including any acquisition that is completed before executing the grant agreement and is part of the airport development included in the project.

§ 151.61 Grant payments: Partial.

(a) Subject to the final determination of allowable project costs as provided in § 151.63 partial grant payments for project costs may be made to a sponsor upon application. Unless previously agreed otherwise, a sponsor may apply for partial payments on a monthly basis. The payments may be paid, upon application, on the basis of the costs of airport development that is accomplished or on the basis of the estimated cost of airport development expected to be accomplished.

(b) Except as otherwise provided, partial grant payments are made in amounts large enough to bring the aggregate amount of all partial payments to the estimated United States share of the project costs of the airport development accomplished under the project as of the date of the sponsor's latest application for payment. In addition, if the sponsor applies, a partial grant payment is made as an advance payment in an amount large enough to bring the aggregate amount of all partial payments to the estimated United States share of the estimated project costs of the airport development expected to be accomplished within 30 days after the date of the sponsor's application for advance payment. However, no partial payment may be made in an amount that would bring the aggregate amount of all partial payments for the project to more than 90 percent of the estimated United States share of the total estimated cost of all airport development included in the project, but not including contingency items, or 90 percent of the maximum obligation of the United States as stated in the grant agreement, whichever amount is the lower. In determining the amount of a partial grant payment, those project costs that the Administrator considers to be of questionable allowability are deducted both from the amount of project costs incurred and from the amount of the estimated total project cost.

§ 151.63 Grant payments: Semifinal and final.

(a) Whenever airport development on a project is delayed or suspended for an appreciable period of time for reasons beyond the sponsor's control and the allowability of the project costs of all airport development completed has been determined on the basis of an audit and review of all costs, a semifinal grant payment may be made in an amount large enough to bring the aggregate amount of all partial grant payments for the project to the United States share of all allowable project costs incurred, even if the amount is more than the 90 percent limitation prescribed in § 151.61(b). However, it may not be more than the maximum obligation of the United States as stated in the grant agreement.

(b) Whenever the project is completed in accordance with the grant agreement, the sponsor may apply for final payment. The final payment is made to the sponsor if—

(1) A final inspection of all work at the airport site has been made jointly by the Area Manager and representatives of the sponsor and the contractor, unless the Area Manager agrees to a different procedure for final inspection.

(2) A final audit of the project account has been completed by appropriate personnel of the FAA; and

(3) The sponsor has furnished final "as constructed" plans, unless otherwise agreed to by the Administrator.

(c) Based upon the final inspection, the final audit, the plans, and the documents and supporting information required by § 151.57(a), the Administrator determines the total amount of the allowable project costs and pays the sponsor the United States' share, less the total amount of all prior payments.

§ 151.65 Memoranda and hearings.

(a) At any time before the FAA issues a grant offer for a project, any public agency or person having a substantial interest in the disposition of the project application may file a memorandum supporting or opposing it with the Area Manager of the area in which the project is located. In addition, that public agency or person may request a public hearing on the location of the airport to be developed. If, in the Administrator's opinion that public agency or person has a substantial interest in the matter, a public hearing is held.

(b) The Administrator sets the time and place of each hearing under this section, to avoid undue delay in disposing of the application, to afford reasonable time for all parties concerned to prepare for it, and to hold it at a place convenient to the sponsor. Notice of the time and place is mailed to the public agency or person filing the memorandum, the sponsor, and any other necessary persons.

(c) The purpose of the hearing is to help the Administrator discover facts relating to the location of the airport that is proposed to be developed under an application pending before him. There are no adverse parties or interests and no defendant or respondent. They are not hearings for the purposes of 5 U.S.C. 554, 556, and 557, and do not terminate in an adjudication as defined in that Act.

(d) Each hearing under this section is conducted by a hearing officer designated by the Administrator. The hearing officer decides the length of the hearing, the kind of testimony to be heard, and all other matters respecting the conduct of the hearing. The hearing is recorded in a manner determined by the hearing officer and the record becomes a part of the record of the project application. The Administrator's decision is not made solely on the basis of the hearing, but on all relevants facts.

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962, as amended by Amdt. 151-11, 31 FR 6686, May 5, 1966; Amdt. 151-35, 34 FR 13699, Aug. 27, 1969]

§ 151.67 Forms.

(a) The various forms used for the purposes of Subparts B and C are as follows:

(1) Requests for Federal-aid, FAA Form 5100-3: Contains a statement requesting Federal-aid in carrying out a project under the Federal Airport Act, with appropriate spaces for inserting information needed for considering the request, including the location of the airport, the amount of funds available to the sponsor, a description of the proposed work, and its estimated cost.

(2) Project application, Form FAA-1624: A formal application for Federal-aid to carry out a project under this part. It contains four parts:

(i) Part I—For pertinent information regarding the airport and proposed work included in the project.

(ii) Part II—For incorporating the representations of the sponsor relating to its legal authority to undertake the project, the availability of funds for its share of the project costs, approvals of other non-United States agencies, the existence of any default on the compliance requirements of § 151.77(a), possible disabilities, and the ownership of lands and interests in lands to be used in carrying out the project and operating the airport.

(iii) Part III—For incorporating the sponsor's assurances regarding the operation and maintenance of the airport, further development of the airport, and the acquisition of any additional interests in lands that may be needed to carry out the project or for operating the airport.

(iv) Part IV—For a statement of the sponsor's acceptance, to be executed by the sponsor and certificated by its attorney.

(3) [Reserved]

(4) Grant agreement, Form FAA-1632:

(i) Part I—Offer by the United States to pay a specified percentage of the allowable costs of the project, as described therein, on specified terms relating to the undertaking and carrying out of the project, determination of allowability of costs, payment of the United States share, and operation and maintenance of the airport in accordance with assurances in the project application.

(ii) Part II—Acceptance of the offer by the sponsor, execution of the acceptance by the sponsor, and certification by its attorney.

(5) Periodic cost estimate, Form FAA-1629: a certification to be executed by the contractor, with space for information regarding the progress of construction work as of a specific date, and the value of the completed work.

(6) Application for grant payment, FAA Form 5100-6: Application for payment under a grant agreement for work completed as of a specific date or to be completed by a specific date, with space for an appropriate breakdown of project costs among the categories shown therein, and certification provisions to be executed by the sponsor and the Area Manager.

(7) Summary of project costs, Form FAA-1630: For inserting the latest revised estimate of total project costs, the total costs incurred as of a specific date, an estimate of the aggregate of those total costs incurred to date and those to be incurred before a specific date in the future.

(b) Copies of the forms named in this section, and assistance in completing and executing them, are available from the Area Manager.

[Doc. No. 1329, 27 FR 12351, Dec. 13, 1962, as amended by Amdt. 151-8, 30 FR 8040, June 23, 1965; Amdt. 151-11, 31 FR 6686, May 5, 1966; Amdt. 151-17, 31 FR 16525, Dec. 28, 1966; Amdt. 151-25, 33 FR 14535, Sept. 27, 1968; Amdt. 151-34, 34 FR 12883, Aug. 8, 1969]

Subpart C—Project Programing Standards

AUTHORITY: 60 Stat. 170; sec. 10, 62 Stat. 453; secs. 313(a), 314, 601, 607, 72 Stat. 752; secs. 3, 4, 63 Stat. 700; 49 U.S.C. 1101-1119, 1159, 1354(a), 1355, 1421, 1427; 50 U.S.C. App. 1622(b), 1622(c), unless otherwise noted.

SOURCE: Docket No. 1329, 27 FR 12357 Dec. 13, 1962, unless otherwise noted.

§ 151.71 Applicability.

(a) This subpart prescribes programing and design and construction standards for projects under the Federal-Aid Airport Program to assure the most efficient use of Program funds and to assure that the most important elements of a national system of airports are provided.

(b) Except for the standards made mandatory by § 151.72(a), the standards prescribed in this subpart that apply to any particular project are those in effect on the date the sponsor accepts the Administrator's offer under § 151.29(c). The standards of § 151.72(a) applicable to a project are those in effect on the date written on the notification of tentative allocation of funds (§ 151.21(b)). Standards that become effective after that date may be applied to the project by agreement between the sponsor and the Administrator.

(Secs. 1-15, 17-21, 60 Stat. 170, 49 U.S.C. 1120)

[Amdt. 151-19, 32 FR 9220, June 29, 1967]

§ 151.72 Incorporation by reference of technical guidelines in Advisory Circulars.

(a) *Provisions incorporated; mandatory standards.* The technical guidelines in the Advisory Circulars, or parts of Circulars, listed in Appendix I of this part, are incorporated into this subpart by reference. Guidelines so incorporated are mandatory standards and apply in addition to the other standards in this subpart. No provision so incorporated and made mandatory supersedes any provision of this Part 151 (other than of App. I) or of any other part of the Federal Aviation Regulations. Each Circular is incorporated with all amendments outstanding at any time unless the entry in Appendix I of this part states otherwise.

(b) *Amendments of Appendix I.* The Director, Airports Service, may add to, or delete from, Appendix I of this part any Advisory Circular or part thereof.

(c) *Availability of Advisory Circulars.* The Advisory Circulars listed in Appendix I of this part may be inspected and copied at any FAA Regional Office, Area Office, or Airports District Office. Copies of the Circulars that are available free of charge may be obtained from any of the offices or from the Federal Aviation Administration, Printing Branch, HQ-438, Washington, D.C. 20553. Copies of the Circulars that are for sale may be bought from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 for the price listed.

[Amdt. 151-13, 31 FR 11605, Sept. 2, 1966, as amended by Doc. No. 8084, 32 FR 5769, Apr. 11, 1967]

§ 151.73 Land acquisition.

(a) The acquisition of land or any interest therein, or of any easement or other interest in airspace, is eligible for inclusion in a project if it was made after May 13, 1946, and is necessary—

(1) To allow the initial development of the airport;

(2) For improvement indicated in the current National Airport Plan;

(3) For ultimate development of the airport, as indicated in the current approved airport layout plan to the extent consistent with the National Airport Plan;

(4) For approach protection meeting the standards of § 77.23 as applied to §§ 77.25 and 77.27 of this chapter;

(5) To allow installing an ALS (as described in § 151.13), in which case the costs of acquiring land needed for it are eligible for 75 percent United States participation if the need is shown in the National Airport Plan, based on the best information available to the FAA for the forecast period;

(6) To allow proper use, operation, or maintenance of the airport as a public facility, including off-site lands needed for locating necessary parts of the utility systems serving the airport;

(7) To allow installing navigational aids by the FAA, if the land is within the airport boundaries; or

(8) To allow relocation of navigational aids.

(b) Appendix A of this part sets forth typical eligible and ineligible items of land acquisition as covered by this section.

[Doc. No. 1329, 27 FR 12357, Dec. 13, 1962, as amended by Amdt. 151-7, 30 FR 7484, June 8, 1965; Amdt. 151-8, 30 FR 8040, June 23, 1965]

§ 151.75 Preparation of site.

(a) Grading, drainage, and associated items of site preparation are eligible for inclusion in a project, but only with respect to one landing strip at any airport, unless the airport qualifies for more than one runway, based on traffic volume or wind conditions (as outlined in § 151.77) and the overall site preparation required for development in accordance with the airport layout plan. The complete clearance of runway clear zone areas is desirable, but, as a minimum, all obstructions as determined by § 77.23 as applied to § 77.27 (b) and (c) of this chapter must be removed. Grading in runway clear zones is eligible only to remove terrain that is an obstruction. The clear zone is not a graded overrun area. Specific site preparation for an airport terminal building is eligible on the same basis as the building itself. The site preparation cost is prorated based on eligible and ineligible building space. Appendix B of this part sets forth typical eligible and ineligible items of site preparation as covered by this section.

(b) For the purposes of this section, eligible drainage work off the airport site includes drainage outfalls, drainage disposal, and interception ditches. If there is damage to adjacent property, its correction is an eligible item for inclusion in the project.

[Doc. No. 1329, 27 FR 12357, Dec. 13, 1962, as amended by Amdt. 151-7, 30 FR 7484, June 8, 1965; Amdt. 151-8, 30 FR 8040, June 23, 1965]

§ 151.77 Runway paving: General rules.

(a) On any airport, paving of the designated instrument landing runway (or dominant runway if there is no designated instrument runway) is eligible for inclusion in a project, within the limits of the current National Airport Plan. Program participation in constructing, reconstructing or resurfacing is limited to a single runway at each airport, unless more than one runway is eligible under a standard in § 151.79 or § 151.80.

(b) The kinds of runway paving that are eligible for inclusion in a project include pavement construction and reconstruction, and include runway grooving to improve skid resistance, and resurfacing to increase the load bearing capacity of the runway or to provide a leveling course to correct major irregularities in the pavement. Runway resealing or refilling joints as an ordinary maintenance matter are not eligible items, except for bituminous resurfacing consisting of at least 100 pounds of plant-mixed material for each square yard, and except for the application of a bituminous surface treatment (two applications of material and cover aggregate as prescribed in FAA Specification P-609) on a pavement the current surface of which consists of that kind of a bituminous surface treatment.

(c) On new pavement construction, the applying of a bituminous seal coat on plant hot-mix bituminous surfaces only, is an eligible item only if initial engineering analysis and design indicate the need for a seal coat. However, any delay in applying it that is caused other than by construction difficulties, makes the application a maintenance item that is not eligible.

(d) In any case in which the need for a seal coat is necessary for a new runway extension or partial reconstruction of a runway, the entire runway may be sealed.

(e) Appendix C to this part sets forth typical eligible and ineligible items of runway paving.

(49 U.S.C. 1120)

[Doc. No. 1329, 27 FR 12357, Dec. 13, 1962, as amended by Amdt. 151-17, 31 FR 16525, Dec. 28, 1966; Amdt. 151-29, 34 FR 1634, Feb. 4, 1969]

§ 151.79 Runway paving: Second runway: wind conditions.

(a) *All airports.* Paving a second runway on the basis of wind conditions is eligible for inclusion in a project only if the sponsor shows that—

(1) The airport meets the applicable standards of paragraph (b), (c), or (d) of this section;

(2) The operational experience, and the economic factors of air traffic at the location, justify an additional runway for the airport; and

(3) The second runway is oriented with the existing paved runway to achieve the maximum wind coverage, with due consideration to the airport noise factor, topography, soil conditions, and other pertinent factors affecting the economy and efficiency of the runway development.

(b) *Airports serving large and small aircraft.* The airport serves both large and small aircraft and the existing paved runway is subject to a crosswind component of more than 15 miles per hour (13 knots) more than 5 percent of the time.

(c) *Airports serving small aircraft only.* The airport serves small aircraft exclusively, and—

(1) The airport has 10,000, or more, aircraft operations each year; and

(2) The existing paved runway is subject to a crosswind component of more than 12 miles per hour (10.5 knots) more than 5 percent of the time.

(d) *Airports serving aircraft of less than 8,000 pounds only.* The airport serves small aircraft of less than 8,000 pounds maximum certificated takeoff weight exclusively and—

(1) The airport has 5,000, or more, aircraft operations each year; and

(2) The existing paved runway is subject to a crosswind component of more than 12 miles per hour (10.5 knots) more than 5 percent of the time.

[Amdt. 151-17, 31 FR 16525, Dec. 28, 1966, as amended by Amdt. 151-28, 34 FR 551, Jan. 15, 1969]

§ 151.80 Runway paving: Additional runway; other conditions.

Paving an additional runway on an airport that does not qualify for a second runway under § 151.79 is eligible if the Administrator, upon consideration on a case-to-case basis, is satisfied that—

(a) The volume of traffic justifies an additional paved runway and the layout and orientation of the additional runway will expedite traffic; or

(b) A combination of traffic volume and aircraft noise problems justifies an additional paved runway for that airport.

[Amdt. 151-17, 31 FR 16525, Dec. 28, 1966]

§ 151.81 Taxiway paving.

(a) The construction, alteration, and repair of taxiways needed to expedite the flow of ground traffic between runways and aircraft parking areas available for general public use are eligible items under the program. Taxiways to serve an area or facility that is primarily for the exclusive or near exclusive use of a tenant or operator that does not furnish aircraft servicing to the public are not eligible. In addition, the policies on resealing or refilling joints, as set forth in § 151.77, apply also to taxiway paving.

(b) Appendix D of this part sets forth typical eligible and ineligible items of taxiway paving.

§ 151.83 Aprons.

(a) The construction, alteration, and repair of aprons are eligible program items upon being shown that they are needed as public use facilities. An apron to serve an area that is primarily for the exclusive or near exclusive use of a tenant or operator who does not furnish aircraft servicing to the public is not eligible. In addition, the policies on resealing or refilling joints, as set forth in § 151.77 apply also to apron paving.

(b) In determining public use for the purposes of this section, the current use being made of a hangar governs, unless there is definite information regarding its future use. In the case of an apron area being built for future hangars, it should be shown that early hangar development is assured and that the hangars will be public facilities.

(c) Appendix E of this part sets forth typical eligible and ineligible items of Apron paving.

§ 151.85 Special treatment areas.

The following special treatment for areas adjacent to pavement is eligible for inclusion in a project in cases where, due to the operation of turbojet powered aircraft, it may be necessary to treat those areas adjacent to runway ends, holding aprons, and taxiways to prevent erosion from the blast effects of the turbojet:

(a) Runway ends—a stabilized area the width of the runway and extending 100 to 150 feet from the end of the runway.

(b) Holding aprons—a stabilized area up to 50 feet from the edge of the pavement.

(c) Taxiway intersections—a stabilized area 25 feet on each side of the taxiway and extending 300 feet from the intersection.

(d) Taxiway (continuous movement of aircraft)—dense turf 25 feet on each side of the taxiway, or in a geographic area where dense turf cannot be established, stabilization.

§ 151.86 Lighting and electrical work: General.

(a) The installing of lighting facilities and related electrical work, as provided in § 151.87, is eligible for inclusion in a project only if the Administrator determines, for the particular airport involved, that they are needed to ensure—

(1) Its safe and efficient use by aircraft under § 151.13; or

(2) Its continued operation and adequate maintenance, and it has a large enough volume (actual or potential) of night operations.

(b) Before the Administrator makes a grant offer to the sponsor of a project that includes installing lighting facilities and related electrical work under paragraph (a) of this section, the sponsor must—

(1) Provide in the project for removing, relocating, or adequately marking and lighting, each obstruction in the approach and turning zones, as provided in § 151.91(a);

(2) Acknowledge its awareness of the cost of operating and maintaining airport lighting; and

(3) Agree to operate the airport lighting installed—

(i) Throughout each night of the year; or

(ii) According to a satisfactory plan of operation, submitted under paragraph (c) of this section.

(c) The sponsor of a project that includes installing airport lighting and related electrical work, under paragraph (a) of this section, may—

(1) Submit to the Administrator a proposed plan of operation of the airport lighting installed for periods less than throughout each night of the year;

(2) Specify, in the proposed plan, the times when the airport lighting installed will be operated; and

(3) Satisfy the Administrator that the proposed plan provides for safety in air commerce, and justifies the investment of Program funds.

(d) Paragraph (b)(3) of this section also applies to each sponsor of a project that includes installing airport lighting and related electrical work if that sponsor has not entered into a grant agreement for the project before September 5, 1968.

(e) If it agrees to comply with paragraph (b)(3) of this section, the sponsor of a project that includes installing airport lighting facilities and related electrical work that has entered into a grant agreement for that project before September 5, 1968, may—

(1) Surrender its air navigation certificate authorizing operation of a "true light" issued before that date; or

(2) Terminate its application for authority to operate a "true light" made before that date.

(Secs. 307, 606, 72 Stat. 749, 779; 49 U.S.C. 1120, 1348, 1426)

[Amdt. 151-24, 33 FR 12545, Sept. 5, 1968]

§ 151.87 Lighting and electrical work: Standards.

(a)-(b) [Reserved]

(c) The number of runways that are eligible for lighting is the same as the number eligible for paving under § 151.77, § 151.79, or § 151.80.

(d) The installing of high intensity runway edge lighting is eligible on a designated instrument landing runway and any other runway with approved straight-in approach procedures. A runway that is eligible for lighting, but does not meet the requirements for 75 percent U.S. participation under § 151.43(d), is eligible for 50 percent U.S. participation in the costs of high intensity runway edge lighting (or the allowable percentage in § 151.43(c) for public land States), if the airport is served by a navigational aid that will allow using instrument approach procedures. If a runway is not eligible for 75 or 50 percent Federal participation in high intensity runway edge lighting but is otherwise eligible for runway lighting, the U.S. share of the cost of runway edge lighting is 50 percent of the cost of the lighting installed but not more than 50 percent of the cost of medium intensity lighting.

(e) In-runway lighting (touchdown zone lighting system, and centerline lighting system) is eligible on the designated instrument landing runway.

(f) Taxiways to eligible runways on airports served by transport aircraft are eligible for lighting. On airports serving only general aviation, the lighting of connecting taxiways is eligible if the runway served is lighted or is programed to be lighted. The lighting of a parallel taxiway is eligible if the taxiway is eligible for paving. Lighting of other taxiways is eligible or not, depending on the complexity of the taxiway system.

(g) Floodlighting of aprons is eligible if there is a proven need for it, including a showing of night operations where the runway is lighted.

(h) Any airport that is eligible to participate in the costs of runway lighting is eligible for the installing of an airport beacon, lighted wind indicator, obstruction lights, lighting control equipment, and other components of basic airport lighting, including separate transformer vaults and connection to the nearest available power source.

(i) The interconnection of two or more power sources on an airport property, the providing of second sources of power, and the installing of standby engine generators of reasonable capacity, are eligible under the program.

(j) Economy approach lighting aids are eligible for inclusion in a project at an airport that will not qualify within the next three years for approach lighting aids installed by FAA under the Facilities and Equipment Program if the economy approach lighting aids—

(1) Will correct a visual deficiency on one of the lighted runways of the airport; or

(2) Will permit operations at an airport at lower minimums.

"Economy approach lighting aids" includes a medium intensity approach lighting system (MALS) that may include a sequence flasher (SF); a runway end identifier lights system (REILS); and an abbreviated visual approach slope indicator (AVASI).

(k) Appendix F of this part sets forth typical eligible and ineligible items of airport lighted covered by § 151.86 and this section.

(Secs. 307, 606, 72 Stat. 749, 799; 49 U.S.C. 1120, 1348, 1426)

[Doc. No. 1329, 27 FR 12357, Dec. 13, 1962, as amended by Amdt. 151-8, 30 FR 8040, June 23, 1965; Amdt. 151-17, 31 FR 16525, Dec. 28, 1966; Amdt. 151-22, 33 FR 8267, June 4, 1968; Amdt. 151-24, 33 FR 12545, Sept. 5, 1968; Amdt. 151-35, 34 FR 13699, Aug. 27, 1969]

§ 151.89 Roads.

(a) Federal-aid Airport Program funds may not be used to resolve highway problems. Only those airport entrance roads that are definitely needed and are intended only as a way in and out of the airport are eligible.

(b) The construction, alteration, and repair of airport roads and streets that are entirely within the airport boundaries are eligible under the program, if needed for operating and maintaining the airport. In the case of an entrance road, a strip right-of-way joining the main body of the airport to the nearest public road may be considered a part of the normal boundary of the airport if—

(1) Adequate title is obtained;

(2) It was acquired to provide an airport entrance road and was not, before the existence of the airport, a public thoroughfare;

(3) The entrance road is intended only as a way in and out of the airport; and

(4) The entrance road extends only to the nearest public highway, road, or street.

(c) An entrance road may be joined to an existing highway or street with a normal fillet connection. However, acceleration-deceleration strips or grade separations are not eligible.

(d) Offsite road or street relocation needed to allow airport development or to remove an obstruction, and is not for entrance road purposes, is eligible.

(e) Appendix G sets forth typical eligible and ineligible items of road construction covered by this section.

§ 151.91 Removal of obstructions.

(a) The removal or relocation, or both, of obstructions, as defined in Technical Standard Order N18 is eligible under the Program in cases where definite arrangements are made to prevent the obstruction from being recreated. In a case where removal is not feasible, the cost of marking or lighting it is eligible. The removal and relocation of structures necessary for essential airport development is eligible. The removal of structures that are not obstructions under § 77.23 of this chapter as applied to § 77.27 of this chapter are eligible when they are located within a runway clear zone.

(b) The removal and relocation of an airport hangar that is an airport hazard (as described in § 151.39(b)) is eligible, if the reerected hangar will be substantially identical to the disassembled one.

(c) Whenever a hangar must be relocated (either for clearance of the site for other airport development or to remove a hazard) and the existing structure is to be relocated with or without disassembly, the cost of the relocation is an eligible item of project costs, including costs incidental to the relocation such as necessary footings and floors. However, if the existing structure is to be demolished and a new hangar is to be built, only the cost of demolishing the existing hangar is an eligible item.

[Doc. No. 1329, 27 FR 12357, Dec. 13, 1962, as amended by Amdt. 151-22, 33 FR 8267, June 4, 1968]

§ 151.93 Buildings; utilities; sidewalks; parking areas; and landscaping.

(a) Only buildings or parts of buildings intended to house facilities or activities directly related to the safety of persons at the airport, including fire and rescue equipment buildings, are eligible items under the Federal-aid Airport Program. To the extent they are necessary to house snow removal and abrasive spreading equipment, and to provide minimum protection for abrasive materials, field maintenance equipment buildings are eligible items in any airport development project for an airport in a location having a mean daily minimum temperature of zero degrees Fahrenheit, or less, for at least 20 days each year for the 5 years preceding the year when Federal aid is requested under § 151.21(a), based on the statistics of the U.S. Department of Commerce Weather Bureau if available, or other evidence satisfactory to the Administrator.

(b) Airport utility construction, installation, and connection are eligible under the Federal-aid Airport Program as follows:

(1) An airport utility serving only eligible areas and facilities is eligible; and

(2) An airport utility serving both eligible and ineligible airport areas and facilities is eligible only to the extent of the additional cost of providing the capacity needed for eligible areas and facilities over and above the capacity necessary for the ineligible areas and facilities.

However, a water system is eligible only to the extent necessary to provide fire protection for aircraft operations, and to provide water for a fire and rescue equipment building.

(c) No part of the constructing, altering, or repairing (including grading, drainage, and other site preparation work) of a facility or area that is to be used as a public parking facility for passenger automobiles is eligible for inclusion in a project.

(d) Landscaping is not eligible for inclusion in a project. However, the establishment of turf on graded areas and special treatment to prevent slope erosion is eligible to the extent of the eligibility of the facilities or areas served, preserved, or protected by the turf or treatment. In the case of turfing or treatment for an area or facility that is partly eligible and partly ineligible, the eligibility of the turfing or treatment is established on a pro rata basis.

(e) The construction of sidewalks is not eligible for inclusion in a project.

[Doc. No. 1329, 27 FR 12357, Dec. 13, 1962, as amended by Amdt. 151-17, 31 FR 16525, Dec. 28, 1966; Amdt. 151-26, 33 FR 18434, Dec. 12, 1968]

§ 151.95 Fences; distance markers; navigational and landing aids; and offsite work.

(a) Boundary or perimeter fences for security purposes are eligible for inclusion in a project.

(b) A blast fence is eligible for inclusion in a project whenever—

(1) It is necessary for safety at a runway end or a holding area near the end of a runway and its installation would be more economical than the acquiring of additional property interests; or

(2) Its installation for safety at a turbojet-passenger gate will result in less separation being needed for gate positions, thereby reducing the need for apron expansion, and it is more economical to build the fence than to expand the apron.

(c) The eligibility of runway distance markers for inclusion in a project is decided on a case-by-case basis.

(d) The relocation of navigational aids is eligible for inclusion in a project whenever necessitated by development on the airport under a Program project and the sponsor is responsible under FAA Order OA 6030.1 (Agency Order 53).

(e) The installation of any of the following landing aids is eligible for inclusion in a project:

(1) Segmented circle.

(2) Wind and landing direction indicators.

(3) Boundary markers.

(f) The initial marking of runway and taxiway systems is eligible for inclusion in a project. The remarking of existing runways or taxiways is eligible if—

(1) Present marking is obsolete under current FAA standards; or

(2) Present marking is obliterated by construction, alteration or repair work included in a FAAP project or by the required routing of construction equipment used therein.

However, apron marking that is not allied with runway and taxiway marking systems, is not eligible.

(g) The following offsite work performed outside of the boundaries of an airport or airport site is eligible for inclusion in a project:

(1) Removal of obstruction as provided in § 151.91.

(2) Outfall drainage ditches, and the correction of any damage resulting from their construction.

(3) Relocating of roads and utilities that are airport hazards as defined in § 151.39(b).

(4) Clearing, grading, and grubbing to allow installing of navigational aids.

(5) Constructing and installing utilities.

(6) Lighting of obstructions.

[Doc. No. 1329, 27 FR 12359, Dec. 13, 1962, as amended by Amdt. 151-8, 30 FR 8040, June 23, 1965; Amdt. 151-17, 31 FR 16525, Dec. 28, 1966]

§ 151.97 Maintenance and repair.

(a) Maintenance work is not airport development as defined in the Federal Airport Act and is not eligible for inclusion in the Program. Therefore, it is necessary in many cases that a determination be made whether particular proposed development is maintenance or repair. For the purpose of these determinations, maintenance includes any regular or recurring work necessary to preserve existing airport facilities in good condition, any work involved in cleaning or caring for existing airport facilities, and any incidental or minor repair work on existing airport facilities, such as—

(1) Mowing and fertilizing of turfed areas;

(2) Trimming and replacing of landscaping material;

(3) Cleaning of drainage systems including ditches, pipes, catch basins, and replacing and restoring eroded areas, except when caused by act of God or improper design;

(4) Painting of buildings (inside and outside) and replacement of damaged items normally anticipated;

(5) Repairing and replacing burned out or broken fixtures and cables, unless major reconstruction is needed;

(6) Paving repairs in localized areas, except where the size of the work is such that it constitutes a major repair item or is part of a reconstruction project; and

(7) Refilling joints and resealing surface of pavements.

(b) Repair includes any work not included in paragraph (a) of this section that is necessary to restore existing airport facilities to good condition or preserve them in good condition.

§ 151.99 Modifications of programing standards.

The Director, Airports Service, or the Regional Director concerned may, on individual projects, when necessary for adaptation to meet local conditions, modify any standard set forth in or incorporated into this subpart, if he determines that the modification will provide an acceptable level of safety, economy, durability, or workmanship.

[Amdt. 151-15, 31 FR 11605, Sept. 2, 1966]

Subpart D—Rules and Procedures for Advance Planning and Engineering Proposals

AUTHORITY: Secs. 1-15 and 17-21, 60 Stat. 170; sec. 308(a), 72 Stat. 750; 49 U.S.C. 1101-1114, 1116-1120, and 1349(a), unless otherwise noted.

SOURCE: Docket No. 6227, 30 FR 8040, June 23, 1965, unless otherwise noted.

§ 151.111 Advance planning proposals: General.

(a) Each advance planning and engineering proposal must relate to an airport layout plan or plans and specifications for the development of a new airport, or the further development of an existing airport. Each proposal must relate to a specific airport, either existing or planned, and may not be for general area planning.

(b) Each proposal for the development or further development of an airport must have as its objective either the development of an airport layout plan, under § 151.5(a), or the development of plans designed to lead to a project application, under §§ 151.21(c) and 151.27, or both.

(c) Each proposal must relate to planning and engineering for an airport that—

(1) Is in a location shown on the National Airport Plan; and

(2) Is not served by scheduled air carrier service and located in a large or medium hub, as identified in the current edition of "Airport Activity Statistics of Certificated Route Air Carriers" (published jointly by FAA and the Civil Aeronautics Board), that is available for inspection at any FAA Area or Regional Office, or for sale by the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

(d) Each proposal must relate to future airport development projects eligible under Subparts B and C.

(49 U.S.C. 1115; sec. 308, 72 Stat. 750, 49 U.S.C. 1349)

[Doc. No. 6227, 30 FR 8040, June 23, 1965, as amended by Amdt. 151-24, 33 FR 12545, Sept. 5, 1968]

§ 151.113 Advance planning proposals: Sponsor eligibility.

The sponsor of an advance planning and engineering proposal must be a public agency, as defined in § 151.37(a), and must be legally, financially, and otherwise able to—

(a) Make the certifications, representations, and warranties required in the advance planning proposal, FAA Form 3731;

(b) Enter into and perform the advance planning agreement;

(c) Provide enough funds to pay all estimated proposal costs not borne by the United States; and

(d) Meet any other applicable requirements of the Federal Airport Act and this subpart.

§ 151.115 Advance planning proposals: Cosponsorship and agency.

Any two or more public agencies desiring to jointly participate in an advance planning proposal may cosponsor it. The cosponsorship and agency requirements and procedures set forth in § 151.33, except § 151.33(a)(1), also apply to advance planning proposals. In addition, the sponsor eligibility requirements set forth in § 151.113 must be met by each participating public agency.

§ 151.117 Advance planning proposals: Procedures; application.

(a) Each eligible sponsor desiring to obtain Federal aid for the purpose of advance planning and engineering must submit a completed FAA Form 3731, "Advance Planning Proposal", to the Area Manager.

(b) The airport layout plan, if in existence, must accompany the advance planning proposal. If the advance planning proposal includes preparation of plans and specifications, enough details to identify the items of development to be covered by the plans and specifications must be shown. The proposal must be accompanied by evidentiary material establishing the basis for the estimated costs under the proposal, such as an offer from an engineering firm containing a schedule of services and charges therefor.

[Doc. No. 6227, 30 FR 8040, June 23, 1965 as amended by Amdt. 151-11, 31 FR 6686, May 5, 1966]

§ 151.119 Advance planning proposals: Procedures; funding.

The funding information required by § 151.23, except the last sentence, also is required in connection with an advance planning proposal. The sponsor's share of estimated proposal costs may not consist of or include the value of donated labor, materials, or equipment.

§ 151.121 Procedures: Offer; sponsor assurances.

Each sponsor must adopt the following covenant implementing the exclusive rights provisions of section 308(a) of the Federal Aviation Act of 1958, that is incorporated by reference into Part I of the Advance Planning Agreement:

> The sponsor—
>
> (a) Will not grant or permit any exclusive right forbidden by section 308(a) of the Federal Aviation Act of 1958 (49 U.S.C. 1349(a)) at the airport, or at any other airport now or hereafter owned or controlled by it;
>
> (b) Agrees that, in furtherance of the policy of the FAA under this covenant, unless authorized by the Administrator, it will not, either directly or indirectly, grant or permit any person, firm or corporation the exclusive right at the airport, or at any other airport now or hereafter owned or controlled by it, to conduct any aeronautical activities, including, but not limited to, charter flights, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, air carrier operations, aircraft sales and services, sale of aviation petroleum products whether or not conducted in conjunction with other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity;
>
> (c) Agrees that it will terminate any existing exclusive right to engage in the sale of gasoline or oil, or both, granted before July 17, 1962, at such an airport, at the earliest renewal, cancellation, or expiration date applicable to the agreement that established the exclusive right; and
>
> (d) Agrees that it will terminate any other exclusive right to conduct any aeronautical activity now existing at such an airport before the grant of any assistance under the Federal Airport Act.

[Amdt. 151-30, 34 FR 3656, Mar. 1, 1969 as amended by Amdt. 151-32, 34 FR 9617, June 19, 1969]

§ 151.123 Procedures: Offer; amendment; acceptance; advance planning agreement.

(a) The procedures and requirements of § 151.29 also apply to approved advance planning proposals. FAA's offer and the sponsor's acceptance constitute an advance planning grant agreement between the sponsor and the United States. The United States does not pay any of the advance planning costs incurred before the advance planning grant agreement is executed.

(b) No grant is made unless the sponsor intends to begin airport development within three years after the date of sponsor's written acceptance of a grant offer. The sponsor's intention must be evidenced by an appropriate written statement in the proposal.

§ 151.125 Allowable advance planning costs.

(a) The United States' share of the allowable costs of an advance planning proposal is stated in the advance planning grant agreement, but is not more than 50 percent of the total cost of the necessary and reasonable planning and engineering services.

(b) The allowable advance planning costs consist of planning and engineering expenses necessarily incurred in effecting the advance planning proposal. Allowable cost items include—

(1) Location surveys, such as preliminary topographic and soil exploration;

(2) Site evaluation;

(3) Preliminary engineering, such as stage construction outlines, cost estimates, and cost/benefit evaluation reports;

(4) Contract drawings and specifications;

(5) Testing; and

(6) Incidental costs incurred to accomplish the proposal, that would not have been incurred otherwise.

(c) To qualify as allowable, the advance planning costs paid or incurred by the sponsor must be—

(1) Reasonably necessary and directly related to the planning or engineering included in the proposal as approved by FAA;

(2) Reasonable in amount; and

(3) Verified by sufficient evidence.

§ 151.127 Accounting and audit.

The requirements of § 151.55 relating to accounting and audit of project costs are also applicable to advance planning proposal costs. However, the requirement of segregating and grouping costs applies only to § 151.55(a) (5) and (7) classifications.

§ 151.129 Payments.

(a) The United States' share of advance planning costs is paid in two installments unless the advance planning grant agreement provides otherwise. Upon request by sponsor, the first payment may be made in an amount not more than 50 percent of the maximum obligation of the United States stipulated in the advance planning grant agreement upon certification by sponsor that 50 percent or more of the proposed work has been completed. The final payment is made upon the sponsor's request after—

(1) The conditions of the advance planning grant agreement have been met;

(2) Evidence of cost of each item has been submitted; and

(3) Audit of submitted evidence or audit of sponsor's records, if considered desirable by FAA, has been made.

(b) When the advance planning proposal relates to the selection of an airport site, the advance planning grant agreement provides that Federal funds are paid to the sponsor only after the site is selected and the Administrator is satisfied that the site selected for the airport is reasonably consistent with existing plans of public agencies for development of the area in which the site is located, and will contribute to the accomplishment of the purposes of the Federal-aid Airport Program.

§ 151.131 Forms.

The forms used for the purpose of obtaining an advance planning and engineering grant are as follows:

(a) *Advance planning proposal. FAA Form 3731*—(1) *Part I.* This part of the form contains a request for the grant of Federal funds under the Federal Airport Act for the purpose of aiding in financing a proposal for the development of an airport layout plan or plans, or both, designed to lead to a project application, with spaces provided for inserting information needed for considering the request, including the location of the airport, a description of the plan or plans to be developed, and the estimate of planning and engineering costs.

(2) *Part II.* This part of the form includes the sponsor's representation that it will comply with the provisions of Part 15 of the Federal Aviation Regulations (14 CFR Part 15), and representations concerning its legal authority to undertake the proposal, the availability of funds for its share of the proposal costs, its intention to initiate construction of a safe, useful and usable airport facility shown on an airport layout plan developed under the proposal, or initiate the construction of the item or items of air-

port development shown on the plans developed under the proposal and designed to lead to a project application, or both, within three years after the date of acceptance of the offer. It also includes the sponsor's representation as to the method of financing the intended construction, approval of other agencies, defaults, possible disabilities, and a statement concerning acceptance to be executed by the sponsor and certified by its attorney.

(b) *Advance planning agreement, FAA Form 3732*—(1) *Part I.* This part of the form contains an offer by the United States to pay a specified percentage not to exceed 50% of the allowable proposal costs, as described therein, on specific terms relating to the carrying out of the proposal, allowability of costs, payment of the United States' share and sponsor's agreement to comply with the exclusive rights provision of section 308(a) of the Federal Aviation Act of 1958.

(2) *Part II.* This part of the form contains the acceptance of the offer by the sponsor, execution of the acceptance by the sponsor, and the certification by the sponsor's attorney.

APPENDIX A

There is set forth below an itemization of typical eligible and ineligible items of land acquisition as covered by § 151.73:

Typical Eligible Items

1. Land for:

(a) Initial acquisition for entire airport developments, including building areas as delineated on the approved airport layout plan.

(b) Expansion of airport facilities.

(c) Clear zones at ends of eligible runways.

(d) Approach lights (land for ALS eligible for 75 percent participation will be limited to an area 3200' x 400' for a Standard ALS and to an area 1700' x 400' for a short ALS located symmetrically about the runway centerline extended, beginning at the end of the runway).

(e) Approach protection.

(f) Airport utilities.

2. Easements for:

(a) Use of air space by aircraft.

(b) Storm-water run-off.

(c) Powerlines to serve offsite obstruction lights.

(d) Airport utilities.

3. Extinguishment of easements which interfere with airport development.

Typical Ineligible Items

1. Land required only for:

(a) Industrial and other non-airport purposes.

[Doc. No. 1329, 27 FR 12359, Dec. 13, 1962, as amended by Amdt. 151-8, 30 FR 8040, June 23, 1965; Amdt. 151-17, 31 FR 16525, Dec. 28, 1966]

APPENDIX B

There is set forth below an itemization of typical eligible and ineligible items of site preparation as covered by § 151.75 of this chapter:

Typical Eligible Items

1. General site preparation:

(a) Clearing of site.

(b) Grubbing of site.

(c) Grading of site.

(d) Storm drainage of site.

2. Erosion control.

3. Grading to remove obstructions.

4. Grading for installing navigation aids on airport property.

5. Dredging of seaplane anchorages and channels.

Typical Ineligible Items

1. Specific site preparation (not a part of an over-all site preparation project) for:

(a) Hangars and other buildings ineligible under the Act.

(b) Public parking facilities for passenger automobiles.

(c) Industrial and other non-airport purposes.

[Doc. No. 1329, 27 FR 12359, Dec. 13, 1962]

APPENDIX C

There is set forth below an itemization of typical eligible and ineligible items of runway paving as covered by § 151.77 of this chapter:

Typical Eligible Items

1. New runways for specified loadings.

2. Runway widening of extensions for specified loadings.

3. Reconstruction of existing runways for specified loadings.

4. Resurfacing runways for specified strength or for smoothness.

5. Runway grooving to improve skid resistance.

Typical Ineligible Items

1. Maintenance-type work, including:

(a) Seal coats.

(b) Crack filling.

(c) Resealing joints.

(d) Runway patching.

(e) Isolated repair.

[Doc. No. 1329, 27 FR 12360, Dec. 13, 1962, as amended by Amdt. 151-29, 34 FR 1634, Feb. 4, 1969]

APPENDIX D

There is set forth below an itemization of typical eligible and ineligible items of taxiway paving as covered by § 151.81 of this chapter:

Typical Eligible Items

1. Basic types of pavement listed as eligible under § 151.77.
2. Taxiway providing access to ends and intermediate points of eligible runways.
3. Bleed-off taxiways.
4. Bypass taxiways.
5. Run-up pads.
6. Primary taxiway systems providing access to hangar areas and other building areas delineated on approved airport layout plan.
7. Secondary taxiways providing access to groups of individual storage hangars and/or multiple-unit tee hangars.

Typical Ineligible Items

1. Basic types of pavement listed as ineligible under § 151.77.
2. Taxiways providing access to an area not offering aircraft storage and/or service to the public.
3. Lead-ins to individual storage hangars.

[Doc. No. 1329, 27 FR 12360, Dec. 13, 1962, as amended by Amdt. 151-8, 30 FR 8040, June 23, 1965]

APPENDIX E

There is set forth below an itemization of typical eligible and ineligible items of apron paving as covered by § 151.83 of this chapter:

Typical Eligible Items

1. Basic types of pavement listed as eligible under § 151.77.
2. Loading ramps.
3. Aprons available for public parking, storage, and service or a combination of any of the three.
4. Aprons serving hangars used for public storage of aircraft or service to the public, or both.
5. Aprons for cargo buildings used for public storage or service to the public, or both.

Typical Ineligible Items

1. Basic types of pavement listed as ineligible under § 151.77.
2. Aprons serving installations for nonpublic use.
3. Paving inside a hangar or on the proposed site of a hangar.
4. Aprons for cargo buildings not under Item 5 of the "Typical Eligible Items".
5. Apron services (pits or pipes for chemicals) will not be eligible.

[Doc. No. 1329, 27 FR 12360, Dec. 13, 1962, as amended by Amdt. 151-17, 31 FR 16525, Dec. 28, 1966]

APPENDIX F

There is set forth below an itemization of typical eligible and ineligible items of airport lighting covered by §§ 151.86 and 151.87 of this chapter:

Typical Eligible Items

1. Runway edge lights (high intensity, medium intensity, and low intensity).
2. In-runway lighting (touchdown zone lighting system, centerline lighting system, and exit taxiway lighting system).
3. Taxiway lights.
4. Taxiway guidance signs.
5. Obstruction lights.
6. Apron floodlights.
7. Beacons.
8. Wind and landing direction indicators.
9. Electrical ducts and manholes.
10. Transformer or generator vaults.
11. Control panels for field lighting.
12. Control equipment for field lighting.
13. Auxiliary power.
14. Lighting offsite obstructions.
15. Electrical vaults for field lighting.

Typical Ineligible Items

1. Electronic navigation aids.
2. Approach lights.
3. Horizon lights.
4. Isolated repair and reconstruction of airport lighting.
5. Lighting of public parking area for passenger automobiles.
6. Street or road lighting.

[Doc. No. 1329, 27 FR 12360, Dec. 13, 1962, as amended by Amdt. 151-24, 33 FR 12545, Sept. 5, 1968; Amdt. 151-35, 34 FR 13699, Aug. 27, 1969]

APPENDIX G

There is set forth below an itemization of typical eligible and ineligible items of road construction covered by § 151.89 of this chapter:

Typical Eligible Items

1. Entrance roads.
2. Service roads for access to public areas.
3. Service roads for airport maintenance (including perimeter airport service road

within airport boundary and not for general public access).

4. Relocation of roads to permit airport development or expansion or to remove obstructions.

Typical Ineligible Items

1. Offsite roads.
2. Roads to areas of exclusive use.

[Doc. No. 1329, 27 FR 12360, Dec. 13, 1962]

APPENDIX H

There is set forth below the contract provision required by the regulations of the Secretary of Labor in Part 5 of Title 29 of the Code of Federal Regulations. Section 151.49(a) requires sponsors to insert this provision in full in each construction contract.

PROVISION REQUIRED BY THE REGULATIONS OF THE SECRETARY OF LABOR

A. Minimum wages. (1) All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act [29 CFR Part 3]), the full amounts due at time of payment computed at wage rates not less than those contained in the wage determination decision(s) of the Secretary of Labor which is (are) attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics; and the wage determination decision(s) shall be posted by the contractor at the site of the work in a prominent place where it (they) can be easily seen by the workers. For the purpose of this paragraph, contributions made or costs reasonably anticipated under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of subparagraph (4) below. Also for the purpose of this paragraph, regular contributions made or costs incurred for more than a weekly period under plans, funds, or programs, but covering the particular weekly period, are deemed to be constructively made or incurred during such weekly period (29 CFR 5.5(a)(1)(i)).

(2) Any class of laborers or mechanics which is not listed in the wage determination(s) and which is to be employed under the contract, shall be classified or reclassified comformably to the wage determination(s), and a report of the action taken shall be sent by the [insert sponsor's name] to the FAA for approval and transmittal to the Secretary of Labor. In the event that the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers and mechanics to be used, the question accompanied by the recommendation of the FAA shall be referred to the Secretary of Labor for final determination (29 CFR 5.5(a)(1)(ii)).

(3) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly wage rate and the contractor is obligated to pay a cash equivalent of such a fringe benefit, an hourly cash equivalent thereof shall be established. In the event the interested parties cannot agree upon a cash equivalent of the fringe benefit, the question, accompanied by the recommendation of the FAA shall be referred to the Secretary of Labor for determination (29 CFR 5.5(a)(1)(iii)).

(4) If the contractor does not make payments to a trustee or other third person, he may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing benefits under a plan or program of a type expressly listed in the wage determination decision of the Secretary of Labor which is a part of this contract: *Provided, however,* The Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

B. Withholding: FAA from sponsor. Pursuant to the terms of the grant agreement between the United States and [insert sponsor's name], relating to Federal-aid Airport Project No. — — —, and Part 151 of the Federal Aviation Regulations (14 CFR Part 151), the FAA may withhold or cause to be withheld from the [insert sponsor's name] so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics employed by the contractor or any subcontractor on the work the full amount of wages required by this contract. In the event of failure to pay any laborer or mechanic employed or working on the site of the work all or part of the wages required by this contract, the FAA may, after written notice to the [insert sponsor's name], take such action as may be necessary to cause the suspension of any further payment or advance of funds until such violations have ceased (29 CFR 5.5(a)(2)).

C. Payrolls and basic records. (1) Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records will contain the name and address of each such employee, his correct classification, rates of pay (including rates of contributions or costs anticipated of the types described in section 1(b)(2) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found, under 29 CFR 5.5(a)(1)(iv) (see subparagraph (4) of subparagraph (A) above), that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits (29 CFR 5.5(a)(3)(i)).

(2) The contractor will submit weekly a copy of all payrolls to the [insert sponsor's name] for transmission to the FAA, as required by § 151.53(a). The copy shall be accompanied by a statement signed by the employer or his agent indicating that the payrolls are correct and complete, that the wage rates contained therein are not less than those determined by the Secretary of Labor and that the classifications set forth for each laborer or mechanic conform with the work he performed. A submission of a "Weekly Statement of Compliance" which is required under this contract and the Copeland regulations of the Secretary of Labor (29 CFR Part 3) and the filing with the initial payroll or any subsequent payroll of a copy of any findings by the Secretary of Labor, under 29 CFR 5.5(a)(1)(iv) (see subparagraph (4) of paragraph (A) above), shall satisfy this requirement. The prime contractor shall be responsible for the submission of copies of payrolls of all subcontractors. The contractor will make the records required under the labor standards clauses of the contract available for inspection by authorized representatives of the FAA and the Department of Labor, and will permit such representatives to interview employees during working hours on the job (29 CFR 5.5(a)(3)(ii)).

D. Apprentices. Apprentices will be permitted to work as such only when they are registered, individually, under a bona fide apprenticeship program registered with a State apprenticeship agency which is recognized by the Bureau of Apprenticeship and Training, United States Department of Labor; or, if no such recognized agency exists in a State, under a program registered with the Bureau of Apprenticeship and Training, United States Department of Labor. The allowable ratio of apprentices to journeymen in any craft classification shall not be greater than the ratio permitted to the contractor as to his entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The contractor or subcontractor will be required to furnish to the [insert sponsor's name] written evidence of the registration of his program and apprentices as well as of the appropriate ratios and wage rates, for the area of construction prior to using any apprentices on the contract work (29 CFR 5.5(a)(4)).

E. Compliance with Copeland Regulations. The contractor shall comply with the Copeland Regulations (29 CFR Part 3) of the Secretary of Labor which are herein incorporated by reference (29 CFR 5.5(a)(5)).

F. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of eight hours in any calendar day or in excess of forty hours in such workweek unless such laborer or mechanic received compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in excess of eight hours in any calendar day or in excess of forty hours in such workweek, as the case may be (29 CFR 5.5(c)(1)).

G. Violations; liability for unpaid wages; liquidated damages. In the event of any violation of paragraph F of this provision, the contractor and any subcontractor responsible therefore shall be liable to any affected employee for his unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed, with respect to each individual laborer or mechanic employed in violation of said paragraph F of this provision, in the sum of $10 for each calendar day on which such employee was required or permitted to work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by said paragraph F of this provision (29 CFR 5.5 (c)(2)).

H. Withholding for unpaid wages and liquidated damages, and priority of payment. (1) The FAA may withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in paragraph G of this provision (29 CFR 5.5(c)(3)).

(2) In the event of failure or refusal of the contractor or any subcontractor to comply with overtime pay requirements of the Contract Work Hours Standards Act, if the funds withheld by the FAA for the violations are not sufficient to pay fully both the unpaid wages due laborers and mechanics and the liquidated damages due the United States, the available funds shall be used first to compensate the laborers and mechanics for the wages to which they are entitled (or an equitable portion thereof when the funds are not adequate for this purpose); and the balance, if any, shall be used for the payment of liquidated damages (29 CFR 5.14 (d)(2)).

I. Subcontracts. The contractor will insert in each of his subcontracts the clauses contained in paragraphs A through H and J of this provision, and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made (29 CFR 5.5(a)(6), 5.5(c)(4)).

J. Contract termination; debarment. A breach of paragraphs A through I of this provision may be grounds for termination of the contract. A breach of paragraphs A through E and I may also be grounds for debarment as provided in 29 CFR 5.6 of the regulations of the Secretary of Labor (29 CFR 5.5(a)(8)).

[Doc. No. 6387, 29 FR 18002, Dec. 18, 1964, as amended by Amdt. 151-9, 30 FR 14197, Nov. 11, 1965; Amdt. 151-38, 35 FR 5112, Mar. 26, 1970]

APPENDIX I

[Lists of Advisory Circulars incorporated by § 151.72 (a) *Circulars available free of charge.*]

Number	Subject
AC 150/5300-3	Adaptation of TSO-N18 Criterion to Clearways and Stopways
AC 150/5325-2A	Airport Surface Areas Gradient Standards
AC 150/5325-4	Runway Length Requirements for Airport Design
AC 150/5330-2	Runway/Taxiway Widths and Clearances
AC 150/5335-1	Airway Taxiways
AC 150/5340-1A	Marking of Serviceable Runways and Taxiways
AC 150/5340-3	Configuration Details of In-Runway Lighting Touchdown Zone, Runway Centerline, and Taxiway Turnoff Lighting Systems
AC 150/5340-4A	Installation Details for Centerline and Touchdown Zone Lighting Systems
AC 150/5340-5	Segmented Circle Airport Marker System
AC 150/5340-7	Marking of Deceptive Closed and Hazardous Areas on Airports
AC 150/5340-13	High Intensity Lighting System
AC 150/5340-14	Economy Approach Lighting Aids
AC 150/5340-15	Taxiway Lighting System
AC 150/5345-1A	Approved Airport Lighting Equipment
AC 150/5345-2	Specification for L-810 Obstruction Light
AC 150/5345-3	Specification for L-821 Airport Lighting Panel for Remote Control of Airport Lighting
AC 150/5345-4	Specification for L-829 Internally Lighted Airport Taxi Guidance Sign
AC 150/5345-5	Specification for L-847 Circuit Selector Switch, 5000 Volt 20 Ampere
AC 150/5345-6	Specification for L-809 Airport Light Base and Transformer Housing
AC 150/5345-7	Specification for L-824 Underground Electrical Cables for Airport Lighting Circuits
AC 150/5345-8	Specification for L-840 Low Intensity Runway, Landing Strip and Taxiway Light
AC 150/5345-9A	Specification for L-819 Fixed Focus Bidirectional High Intensity Runway Light
AC 150/5345-10A	Specification for L-828 Constant Current Regulator with Stepless Brightness Control
AC 150/5345-11	Specification for L-812 Static Indoor Type Constant Current Regulator Assembly, 4 KW and 7½ KW, with Brightness Control for Remote Operation
AC 150/5345-12	Specification for L-801 Beacon for Small Airports
AC 150/5345-13	Specification for L-841 Auxiliary Relay Cabinet Assembly for Pilot Control of Airport Lighting Circuits
AC 150/5345-14	Specification for L-827 "A" Frame Hinged Support for 12-Foot Wind Cone
AC 150/5345-15	Specification for L-842 Airport Centerline Light
AC 150/5345-16	Specification for L-843 Airport In-Runway Touchdown Zone Light
AC 150/5345-17	Specification for L-845 Semiflush Inset Prismatic Airport Light
AC 150/5345-18	Specification for L-811 Static Indoor Type Constant Current Regulator Assembly, 4 KW, With Brightness Control and Runway Selection for Direct Operation
AC 150/5345-19	Specification for L-838 Semiflush Prismatic Airport Light
AC 150/5345-20	Specification for L-802 Runway and Strip Light
AC 150/5345-21	Specification for L-813 Static Indoor Type Constant Current Regulator Assembly, 4 KW and 7½ KW, for Remote Operation of Taxiway Lights
AC 150/5345-22	Specification for L-834 Individual Lamp Series-to-Series Type Insulating Transformer for 5,000 Volt Series Circuit

APPENDIX I—Continued

[Lists of Advisory Circulars incorporated by § 151 72 (a) *Circulars available free of charge*]

Number	Subject
AC 150/5345-23	Specification for L-822 Taxiway Edge Light
AC 150/5345-24	Specification for L-849 Condenser Discharge Type Flashing Light
AC 150/5345-25	Specification for L-848 Medium Intensity Approach Light Bar Assembly
AC 150/5345-26	Specification for L-823 Plug and Receptacle, Cable Connectors
AC 150/5345-27	Specification for L-807 Eight-Foot Illuminated Wind Cone
AC 150/5345-30	Specification for L-846 Electrical Wire for Lighting Circuits To Be Installed in Airport Pavements
AC 150/5345-31	Specification for L-833 Individual Lamp Series-to-Series Type Insulating Transformer for 600 Volt or 3,000 Volt Series Circuits
AC 150/5345-32	Specification for L-837 Large-Size Light Base and Transformer Housing
AC 150/5345-33	Specification for L-844 Individual Lamp Series-to-Series Type Insulating Transformer for 5,000 Volt Series Circuit 20/6.6 Amperes 200 Watt
AC 150/5345-34	Specification for L-839 Individual Lamp Series-to-Series Type Insulating Transformer for 5,000 Volt Series Circuit 6.6/20 Amperes 300 Watt
AC 150/5345-35	Specification for L-816 Circuit Selector Cabinet Assembly for 600 Volt Series Circuits
AC 150/5345-36	Specification for L-808 Lighted Wind Tee
AC 150/5345-37A	FAA Specification L-850, Light Assembly, Airport Runway Centerline
AC 150/5370-3	Materials and Tests Required by AC 150/5370-1, Standard Specifications for Construction of Airports
AC 150/5310-1	Preparation of Airport Layout Plans
(b) *Circulars for sale at the price stated*	
AC 150/5370-1	Standard Specifications for Construction of Airports. $2.75
AC 150/5370-1 CH 1	Standard Specifications for Construction of Airports. $0.35

[Amdt. 151-13, 31 FR 11606, Sept. 2, 1966, as amended by Amdt. 151-15, 31 FR 13423, Oct. 18, 1966]

PART 152—AIRPORT AID PROGRAM

Subpart A—General

Sec.
152.1 Applicability.
152.3 Definitions.
152.5 Exemptions.
152.7 Certifications.
152.9 Forms.
152.11 Incorporation by reference.

Subpart B—Eligibility Requirements and Application Procedures

152.101 Applicability.
152.103 Sponsors: Airport development.
152.105 Sponsors and planning agencies: Airport planning.
152.107 Project eligibility: Airport development.
152.109 Project eligibility: Airport planning.
152.111 Application requirements: Airport development.
152.113 Application requirements: Airport planning.
152.115 Grant agreement: Offer, acceptance and amendment.
152.117 Public hearings.
152.119 Contract requirements and procurement standards.

Subpart C—Funding of Approved Projects

152.201 Applicability.
152.203 Allowable project costs.
152.205 United States share of project costs.
152.207 Proceeds from disposition of land.
152.209 Grant payments: General.
152.211 Grant payments: Land acquisition.
152.213 Grant closeout requirements.

Subpart D—Accounting and Reporting Requirements

152.301 Applicability.
152.303 Financial management system.
152.305 Accounting records.
152.307 Retention of records.
152.309 Availability of sponsor's records.
152.311 Availability of contractor's records.
152.313 Property management standards.
152.315 Reporting on accrual basis.
152.317 Report of Federal cash transactions.
152.319 Monitoring and reporting of program performance.
152.321 Notice of delay or acceleration.
152.323 Budget revision: Airport development.
152.325 Financial status report: Airport planning.

Subpart E—Nondiscrimination in Airport Aid Program

152.401 Applicability.
152.403 Definitions.
152.405 Assurances.
152.407 Affirmative action plan: General.
152.409 Affirmative action plan standards.
152.411 Affirmative action steps.
152.413 Notice requirement.

Sec.
152.415 Records and reports.
152.417 Monitoring employment.
152.419 Minority business.
152.421 Public accommodations, services, and benefits.
152.423 Investigation and enforcement.

Subpart F—Suspension and Termination of Grants

152.501 Applicability.
152.503 Suspension of grant.
152.505 Termination for cause.
152.507 Termination for convenience.
152.509 Request for reconsideration.

Subpart G—Energy Conservation in Airport Aid Program

152.601 Purpose.
152.603 Applicability.
152.605 Definitions.
152.607 Building design requirements.
152.609 Energy conservation practices.
APPENDIX A—CONTRACT AND LABOR PROVISIONS
APPENDIX B—LIST OF ADVISORY CIRCULARS INCORPORATED BY § 152.11
APPENDIX C—PROCUREMENT PROCEDURES AND REQUIREMENTS
APPENDIX D—ASSURANCES

AUTHORITY: Airport and Airway Development Act of 1970, as amended (49 U.S.C. 1701 *et seq.*); sec. 1.47(f)(1) Regulations of the Office of the Secretary of Transportation (49 CFR 1.47(f)(1)), unless otherwise noted.

SOURCE: Docket No. 19430, 45 FR 34784, May 22, 1980, unless otherwise noted.

Subpart A—General

§ 152.1 Applicability.

This part applies to airport planning and development under the Airport and Airway Development Act of 1970, as amended (49 U.S.C. 1701 *et seq.*).

§ 152.3 Definitions.

The following are definitions of terms used throughout this part:

"AADA" means the Airport and Airway Development Act of 1970, as amended (49 U.S.C. 1701 *et seq.*).

"Air carrier airport" means—

(1) An existing public airport regularly served, or a new public airport that the Administrator determines will be regularly served, by an air carrier, other than a charter air carrier, certificated by the Civil Aeronautics Board under section 401 of the Federal Aviation Act of 1958; and

(2) A commuter service airport.

"Airport" means—

(1) Any area of land or water that is used, or intended for use, for the landing and takeoff of aircraft;

(2) Any appurtenant areas that are used, or intended for use, for airport buildings, other airport facilities, or rights-of-way; and

(3) All airport buildings and facilities located on the areas specified in this definition.

"Airport development" means—

(1) Any work involved in constructing, improving, or repairing a public airport or portion thereof, including the removal, lowering, relocation, and marking and lighting or airport hazards, and including navigation aids used by aircraft landing at, or taking off from, a public airport, and including safety equipment required by rule or regulation for certification of the airport under section 612 of the Federal Aviation Act of 1958, and security equipment required of the sponsor by the FAA by rule or regulation for the safety and security of persons or property on the airport, and including snow removal equipment, and including the purchase of noise suppressing equipment, the construction of physical barriers, and landscaping for the purpose of diminishing the effect of aircraft noise on any area adjacent to a public airport.

(2) Any acquisition of land or of any interest therein, or of any easement through or other interest in airspace, including land for future airport development, which is necessary to permit any such work or to remove or mitigate or prevent or limit the establishment of, airport hazards; and

(3) Any acquisition of land or of any interest therein necessary to insure that such land is used only for purposes which are compatible with the noise levels of the operation of a public airport.

"Airport hazard" means any structure or object of natural growth located on or in the vicinity of a public airport, or any use of land near a public airport, that—

(1) Obstructs the airspace required for the flight of aircraft landing or taking off at the airport; or

(2) Is otherwise hazardous to aircraft landing or taking off at the airport.

"Airport layout plan" means a plan for the layout of an airport, showing existing and proposed airport facilities.

"Airport master planning" means the development for planning purposes of information and guidance to determine the extent, type, and nature of development needed at a specific airport.

"Airport system planning" means the development for planning purposes of information and guidance to determine the extent, type, nature, location, and timing of airport development needed in a specific area to establish a viable and balanced system of public airports.

"Audit" means the examination and verification of part or all of the documentary evidence supporting an item of project cost in accordance with Attachment P of Office of Management and Budget Circular A-102 (44 FR 60958).

"Commuter service airport" means an air carrier airport—

(1) That is not served by an air carrier certificated under section 401 of the Federal Aviation Act of 1958;

(2) That is regularly served by one or more air carriers operating under an exemption granted by the Civil Aeronautics Board from section 401(a) of the Federal Aviation Act of 1958; and

(3) At which not less than 2,500 passengers were enplaned during the preceding calendar year by air carriers operating under an exemption from section 401(a).

"Force account" means—

(1) The sponsor's or planning agency's own labor force; or

(2) The labor force of another public agency acting as an agent of the sponsor or planning agency.

"General aviation airport" means a public airport other than an air carrier airport.

"Landing area" means an area used, or intended to be used, for the landing, takeoff, or surface maneuvering of aircraft.

"NASP" means the National Airport System Plan.

"National Airport System Plan" means the plan for the development of public airports in the United States formulated by the Administrator under section 12 of the AADA.

"Nonrevenue producing public-use areas" means areas that are directly related to the movement of passengers and baggage in air commerce within the boundaries of the airport.

"Passengers enplaned" means—

(1) United States domestic, territorial, and international revenue passenger enplanements in scheduled and nonscheduled service of air carriers; and

(2) Revenue passenger enplanements by foreign air carriers in intrastate and interstate commerce.

"Planning agency" means a planning agency designated by the Administrator that is authorized by the laws of a State, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands, or Guam, or by the laws of a political subdivision of any of those entities, to engage in areawide planning for the areas in which assistance under this part is to be used.

"Project" means a project for the accomplishment of airport development, airport master planning, or airport system planning.

"Project costs" means any costs involved in accomplishing a project.

"Project formulation costs" means, with respect to projects for airport development, any necessary costs of formulating a project including—

(1) The costs of field surveys and the preparation of plans and specifications;

(2) The acquisition of land or interests in land, or easement through or other interests in airspace; and

(3) Any necessary administrative or other incidental costs incurred by the sponsor specifically in connection with the accomplishment of a project for airport development, that would not have been incurred otherwise.

"Public agency" means—

(1) A state, the Commonwealth of Puerto Rico, the Virgin Islands, Amer-

ican Samoa, the Trust Territory of the Pacific Islands, the Government of the Northern Marianas, Guam, or any agency of those entities;

(2) A municipality or other political subdivision;

(3) A tax-supported organization; or

(4) An Indian tribe or pueblo.

"Public airport" means any airport that—

(1) Is used, or intended to be used, for public purposes;

(2) Is under the control of a public agency; and

(3) Has a property interest satisfactory to the Administrator in the landing area.

"Reliever airport" means a general aviation airport designated by the Administrator as having the primary function of relieving congestion at an air carrier airport by diverting from that airport general aviation traffic.

"Runway Clear Zone" means an area at ground level underlying a portion of the approach surface specified in the standards incorporated into this part by § 152.11.

"Satisfactory property interest" means—

(1) Title free and clear of any reversionary interest, lien, easement, lease, or other encumbrance that, in the opinion of the Administrator would—

(i) Create an undue risk that it might deprive the sponsor of possession or control;

(ii) Interfere with the use of the airport for public airport purposes; or

(iii) Make it impossible for the sponsor to carry out the agreements and convenants in its grant application;

(2) Unless a shorter term is authorized by the Administrator, a lease of not less than 20 years granted to the sponsor by another public agency, or the United States, that has title as described in paragraph (1) of this definition, on terms that the Administrator considers satisfactory;

(3) In the case of an off-airport area, title or an agreement, easement, leasehold or other right or property interest that, in the Administrator's opinion, provides reasonable assurance that the sponsor will not be deprived of its right to use the land for the intended purpose during the period necessary to meet the requirements of the grant agreement; or

(4) In the case of a runway clear zone, an easement or a covenant running with the land, giving the airport operator or owner enough control to rid the clear zone of all airport hazards and prevent the creation of future airport hazards.

"Sponsor" means any public agency that, whether individually or jointly with one or more other public agencies, submits to the Administrator, in accordance with this part, an application for financial assistance.

"Stage development" means airport development accomplished under stage construction over not less than two years where the sponsor assures that any development not funded under the initial grant agreement will be completed with or without Federal funds.

"State" means a State of the United States or the District of Columbia.

"Terminal development" means airport development in the nonrevenue producing public-use areas which are associated with the terminal and which are directly related to the movement of passengers and baggage in air commerce within the boundaries of the airport, including, but not limited to, vehicles for the movement of passengers between terminal facilities and aircraft.

"Unified Planning Work Program" means a single document prepared by a local areawide planning agency that identifies all transportation and related planning activities that will be undertaken within the metropolitan area during a one-year or two-year period.

§ 152.5 Exemptions.

(a) Except as provided in paragraph (b) of this section, any interested person may petition the Regional Director concerned for a temporary or permanent exemption from any requirement of this part.

(b) The Regional Director concerned does not issue an exemption from any rule of this part if the grant of exemption would be inconsistent with a specific provision of, or the purpose of, the AADA, or any other applicable Federal law.

(c) Each petition filed under this section must—

(1) Unless otherwise authorized by the Regional Director concerned, be submitted not less than 60 days before the proposed effective date of the exemption;

(2) Be submitted in duplicate to the FAA Regional Office or Airports District Office having jurisdiction over the area in which the airport is located;

(3) Contain the text or substance of the rule from which the exemption is sought;

(4) Explain the nature and extent of the relief sought; and

(5) Contain any information, views, or arguments in support of the exemption.

(d) The Regional Director concerned either grants or denies the exemption and notifies the petitioner of the decision. The FAA publishes a summary of the grant or denial of petition for exemption in the FEDERAL REGISTER. The summary includes—

(1) The docket number of the petition;

(2) The name of the petitioner;

(3) A citation of each rule from which relief is requested;

(4) A brief description of the general nature of the relief requested; and

(5) The disposition of the petition.

(e) Official FAA records, including grants and denials of exemptions, relating to petitions for exemption are maintained in current docket form in the Office of the Regional Counsel for the region concerned.

(f) Any interested person may—

(1) Examine any docketed material at the Office of the Regional Counsel, at any time after the docket is established, except material that is ordered withheld from the public under section 1104 of the Federal Aviation Act of 1958 (49 U.S.C. 1504); and

(2) Obtain a photostatic or similar copy of docketed material upon paying the same fee as that prescribed in 49 CFR Part 7.

§ 152.7 Certifications.

(a) Subject to such terms and conditions as the Administrator may prescribe, a sponsor or a planning agency may submit, with respect to any provision of this part implementing a statutory or administrative requirement imposed on the sponsor or planning agency under the AADA, a certification that the sponsor or planning agency has complied or will comply with the provision, instead of making the showing required.

(b) The Administrator exercises discretion in determining whether to accept a certification.

(c) Acceptance by the Administrator of a certification from a sponsor or planning agency may be rescinded by the Administrator at any time if, in the Administrator's opinion, it is necessary to do so.

(d) If the Administrator determines that it is necessary, the sponsor or planning agency, on request, shall show compliance with any requirement for which a certification was accepted.

§ 152.9 Forms.

Any form needed to comply with this part may be obtained at any FAA Regional Office or Airports District Office.

§ 152.11 Incorporation by reference.

(a) *Mandatory standards.* The advisory circulars listed in Appendix B to this part are incorporated into this part by reference. The Director, Office of Airport Standards, determines the scope and content of the technical standards to be included in each advisory circular in Appendix B, and may add to, or delete from, Appendix B any advisory circular or part thereof. Except as provided in paragraph (c) of this section, these guidelines are mandatory standards.

(b) *Modification of standards.* When necessary to meet local conditions, any technical standard set forth in Appendix B may be modified for individual projects, if it is determined that the modifications will provide an acceptable level of safety, economy, durability, and workmanship. The determination and modification may be made by the Director, Office of Airport Standards, or the appropriate Regional Director, in instances where the authority has not been specifically reserved by the Director, Office of Airport Standards.

(c) *State standards.* Standards established by a state for airport development at general aviation airports in the state may be the standards applicable to those airports when they have been approved by the Director, Office of Airport Standards, or the appropriate Regional Director, in instances where approval authority has not been specifically reserved by the Director, Office of Airport Standards.

(d) *Availability of advisory circulars.* The advisory circulars listed in Appendix B may be inspected and copied at any FAA Regional Office or Airports District Office. Copies of the circulars that are available free of charge may be obtained from any of those offices or from the FAA Distribution Unit, M-443.1, Washington, D.C. 20590. Copies of the circulars that are for sale may be bought from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Subpart B—Eligibility Requirements and Application Procedures

SOURCE: Docket No. 19430, 45 FR 34786, May 22, 1980, unless otherwise noted.

§ 152.101 Applicability.

This subpart contains requirements and application procedures applicable to airport development and planning projects.

§ 152.103 Sponsors: Airport development.

(a) To be eligible to apply for a project for airport development with respect to a particular airport the following requirements must be met:

(1) Each sponsor must be a public agency authorized by law to submit the project application;

(2) If a sponsor is the holder of an airport operating certificate issued for the airport under Part 139 of this chapter, it must be in compliance with the requirements of Part 139.

(3) When any of the the following agreements is applicable to an airport which the sponsor owns or controls, the sponsor must have complied with the agreement, or show to the satisfaction of the Administrator that it will comply or, for reasons beyond its control, cannot comply with the agreement:

(i) Each grant agreement made with it under the Federal Airport Act (49 U.S.C. 1101 *et seq.*), or the AADA.

(ii) Each convenant in a conveyance to it under section 16 of the Federal Airport Act or section 23 of the AADA.

(iii) Each convenant in a conveyance to it of surplus airport property under section 13(a) of the Surplus Property Act (50 U.S.C. App 1622(g)) or under Regulation 16 of the War Assets Administration.

(4) The sponsor, in the case of a single sponsor, or one or more of the cosponsors must have, or be able to obtain—

(i) Funds to pay all estimated costs of the project that are not to be born by the United States; and

(ii) Satisfactory property interests in the lands to be developed or used as part of, or in connection with, the airport as it will be after the project is completed.

(b) Another public agency may act as agent of the public agency that is to own and operate the airport, for the purpose of channeling grant funds in accordance with state or local law, without becoming a sponsor.

§ 152.105 Sponsors and planning agencies: Airport planning.

(a) To be eligible to apply for a project for airport planning—

(1) If the project is for airport master planning—

(i) Each sponsor must be a public agency and meet the requirements of § 152.103(a)(3); and

(ii) The sponsor, in the case of a single sponsor, or one or more cosponsors must be legally able to implement the planning, within the existing or proposed airport boundaries, that results from the project study.

(2) If the project is for airport system planning, each sponsor must be a planning agency.

(b) Another public agency or planning agency may act as agent of another public agency or planning agency, for the purpose of channeling grant funds in accordance with state or local law, without becoming a sponsor.

§ 152.107 Project eligibility: Airport development.

(a) Except in the case of approved stage development, each project for airport development must provide for—

(1) Development of an airport or unit of an airport that is safe, useful, and usable; or,

(2) An additional facility that increases the safety, usefulness, and usability of an airport.

(b) Unless otherwise authorized by the Administrator, a project for airport development must involve more than $25,000 in United States funds.

(c) The development included in a project for airport development must—

(1) In the opinion of the Administrator, be "airport development" as defined in § 152.3;

(2) Be identified as airport development in the mandatory standards incorporated into this part by § 152.11; and

(3) Be described in an approved airport layout plan.

(d) The airport involved in a project for airport development must be included in the current NASP.

(e) In complying with paragraph (a) of this section, the sponsor must—

(1) Own, acquire, or agree to acquire control over, or a property interest in, runway clear zones that the Administrator considers adequate; and

(2) Provide for approach and runway lighting systems satisfactory to the Administrator.

§ 152.109 Project eligibility: Airport planning.

(a) *Airport master planning.* A proposed project for airport master planning is not approved unless—

(1) The location of the existing or proposed airport is included in the current NASP;

(2) In the opinion of the Administrator, the proposed planning would promote the effective location of public airports and the development of an adequate NASP; ..

(3) The project is airport master planning as defined in § 152.3;

(4) If the project has been determined to have areawide significance by an appropriate areawide agency, it has been incorporated into a unified planning work program; and

(5) In the case of a proposed project for airport master planning in a large or medium air traffic hub, in the opinion of the Administrator—

(i) There is an appropriate system plan identifying the need for the airport;

(ii) The absence of a system plan is due to the failure of the responsible planning agency to proceed with its preparation; or

(iii) An existing system plan is not acceptable.

(b) *Airport system planning.* A proposed project for airport system planning is not approved unless—

(1) In the opinion of the Administrator, the project promotes the effective location of public airports;

(2) In the opinion of the Administrator, the project promotes the development of an adequate NASP;

(3) The project is airport system planning as defined in § 152.3; and

(4) When the project encompasses a metropolitan area that includes a large or medium hub airport, the project is incorporated in a unified planning work program.

§ 152.111 Application requirements: Airport development.

(a) An eligible sponsor that desires to obtain Federal aid for eligible airport development must apply to the FAA in accordance with this section. The sponsor must apply on a form and in a manner prescribed by the Administrator, through the FAA Airports District Office or Airports Field Office having jurisdiction over the area where the sponsor is located or, where there is no such office, the Regional Office having that jurisdiction.

(b) *Preapplication for Federal assistance.* A preapplication for Federal assistance must be submitted unless—

(1) The Federal fund request is for $100,000 or less; or,

(2) The project does not include construction, land acquisition, or land improvement.

(c) Unless otherwise authorized by the Administrator, the preapplication required by paragraph (b) of this section must be accompanied by the following:

(1) A list of the items of airport development requested for programming, together with an itemized estimated cost of the work involved.

(2) A sketch or sketches of the airport layout indicating the location for each item of work proposed, using the same item numbers used in the list required by paragraph (c)(1) of this section.

(3) If the proposed project involves the displacement of persons or the acquisition of real property, the assurances required by §§ 25.57 and 25.59, as applicable, of the Regulations of the Office of the Secretary of Transportation (49 CFR 25.57 and 25.59), whether or not reimbursement is being requested for the costs of displacement or real property acquisition.

(4) Any comments or statements required by Appendix E, Procedures Implementing Office of Management and Budget Circular A-95, to this part, with a showing that they have been considered by the sponsor.

(5) If the proposed development involves the construction of eligible airport buildings or the acquisition of eligible fixed equipment to be contained in those buildings, a statement whether the proposed development will be in an area of the community that has been identified by the Department of Housing and Urban Development as an area of special flood hazard as defined in the Flood Disaster Protection Act of 1973 (42 U.S.C. 4002 *et seq.*).

(6) If the proposed development is in an area of special flood hazard, a statement whether the community is participating in the National Flood Insurance Program (42 U.S.C. 4011 *et seq.*).

(7) The sponsor's environmental assessment prepared in conformance with Appendix 6 of FAA Order 1050.1C, "Policies and Procedures for Considering Environmental Impacts" (45 FR 2244; Jan. 10, 1980), and FAA Order 5050.4, "Airport Environmental Handbook" (45 FR 56624; Aug. 24, 1980), if an assessment is required by Order 5050.4. Copies of these orders may be examined in the Rules Docket, Office of the Chief Counsel, FAA, Washington, D.C., and may be obtained on request at any FAA regional office headquarters or any airports district office.

(8) A showing that the sponsor has complied with the public hearing requirements in § 152.117.

(9) In the case of a proposed new airport serving any area that does not include a metropolitan area, a showing that each community in which the proposed airport is to be located has approved the proposed airport site through the body having general legislative jurisdiction over it.

(10) In the case of a proposed project at an air carrier airport, a statement that the sponsor, in making the decision to undertake the project, has consulted with air carriers using the airport.

(11) In the case of a proposed project at a general aviation airport, a statement that the sponsor, in making the decision to undertake the project, has consulted with fixed-base operators using the airport.

(12) In the case of terminal development, a certification that the airport has, or will have, all safety and security equipment required for certification of the airport under Part 139 and has provided, or will provide, for access to the passenger enplaning and deplaning area to passengers enplaning or deplaning from aircraft other than air carrier aircraft.

(d) *Allocation of funds.* If the proposed project for airport development is selected by the Administrator for inclusion in a program, a tentative allocation of funds is made for the project and the sponsor is notified of the allocation. The tentative allocation may be withdrawn if the sponsor does not submit a project application in accordance with paragraph (f) of this section.

(e) *Application for Federal assistance.* As soon as practicable after receiving notice of a tentative allocation or, if a preapplication is not required (as provided in paragraph (b) of this section), an application for Federal assistance must be submitted.

(f) Unless otherwise authorized by the Administrator, the application required by paragraph (e) of this section must be accompanied by the following:

(1) When a preapplication has not been previously submitted, the information required by paragraph (c) of this section.

(2) A property map of the airport showing—

(i) The property interests of each sponsor in all the lands to be developed or used as part of, or in connection with, the airport as it will be when the project is completed; and

(ii) All property interests acquired or to be acquired, for which U.S. aid is requested under the project.

(3) With respect to all lands to be developed or used as a part of, or in connection with, the airport (as it will be when the project is completed) in which a satisfactory property interest is not held by a sponsor, a covenant by the sponsor that it will obtain a satisfactory property interest before construction is begun or within a reasonable time if not needed for construction.

(4) If the proposed project involves the displacement of persons, the relocation plan required by § 25.55 of the Regulations of the Office of the Secretary of Transportation.

(5) When the project involves an airport location, a runway location, or a major runway extension, a written certification from the Governor of the state in which the project may be located (or a delegatee), providing reasonable assurance that the project will be located, designed, constructed, and operated so as to comply with applicable air and water quality standards.

(6) A statement whether any building, installation, structure, location, or site of operations to be utilized in the performance of the grant or any contract made pursuant to the grant appears on the list of violating facilities distributed by the Environmental Protection Agency under the provisions of the Clean Air Act and Federal Water Pollution Control Act (40 CFR Part 15).

(7) The assurances on Civil Rights required by § 21.7 of the Regulations of the Office of the Secretary of Transportation (49 CFR 21.7) and § 152.405.

(8) Plans and specifications for the proposed development in accordance with the design and construction standards listed in Appendix B to this part.

(9) The applicable assurances required by Appendix D to this part.

(10) If cosponsors are not willing to assume, jointly and severally, the obligations imposed on them by this part and the grant agreement, a statement satisfactory to the Administrator indicating—

(i) The responsibilities of each sponsor with respect to the accomplishment of the proposed project and the operation and maintenance of the airport;

(ii) The obligations each will assume to the United States; and

(iii) The name of the sponsor or sponsors who will accept, receipt for, and disburse grant payments.

(g) *Additional documentation.* The Administrator may request additional documentation as needed to support specific items of development or to comply with other Federal and local requirements as they pertain to the requested development.

(Secs. 303, 307, 308, 312, and 313, Federal Aviation Act of 1958 (49 U.S.C. 1344, 1348, 1349, 1353, and 1354); sec. 6(c), Dept. of Transportation Act (49 U.S.C. 1655(c)); Airport and Airway Development Act of 1970, as amended (49 U.S.C. 1701 et seq.); sec. 1.47(f)(1), Regulations of the Office of the Secretary of Transportation (49 CFR 1.47(1)); OMB Circular A-95, Revised (41 FR 2052; Jan. 13, 1976))

[Doc. No. 19430, 45 FR 34784, May 22, 1980, as amended by Amdt. 152-11, 45 FR 56622, Aug. 25, 1980; 45 FR 58107, Sept. 2, 1980; Amdt. 152-13, 46 FR 30809, June 11, 1981]

§ 152.113 Application requirements: Airport planning.

(a) *Application for Federal assistance.* An eligible sponsor or planning agency that desires to obtain Federal aid for eligible airport master planning or airport system planning must submit an application for Federal assistance, on a form and in a manner prescribed by the Administrator, to the appropriate FAA Airports District Office or Airports Field Office having jurisdiction over the area where the sponsor or planning agency is located or, where there is no such office, the Regional Office having that jurisdiction.

(b) Unless otherwise authorized by the Administrator, the application required by paragraph (a) of this section must be accompanied by the following:

(1) Any comments or statements required by Appendix E, Procedures Implementing Office of Management and Budget Circular A-95, to this part.

(2) Budget (project costs) information subdivided into the following functions, as appropriate, and the basis for computation of these costs:

(i) Third party contracts.

(ii) Sponsor force account costs.

(iii) Administrative costs.

(3) A program narrative describing the proposed planning project including—

(i) The objective;

(ii) The results and benefits expected;

(iii) A Work Statement including—

(A) A detailed description of each work element;

(B) A list of each organization, consultant, and key individual who will work on the planning project, and the nature of the contribution of each; and

(C) A proposed schedule of work accomplishment; and

(iv) The geographic location of the airport or the boundaries of the planning area.

(4) If the sponsor proposes to accomplish the project with its own forces or those of another public or planning agency—

(i) An assurance that adequate, competent personnel are available to satisfactorily accomplish the proposed planning project, and

(ii) A description of the qualifications of the key personnel.

(5) If cosponsors are not willing to assume, jointly, and severally, the obligations imposed on them by this part and the grant agreement, a statement satisfactory to the Administrator indicating—

(i) The responsibilities of each sponsor with respect to the accomplishment of the proposed project;

(ii) The obligations each will assume to the United States; and

(iii) The name of the sponsor or sponsors who will accept, receipt for, and disburse grant payments.

(6) The assurances on Civil Rights required by § 21.7 of the Regulations of the Office of the Secretary of Transportation (49 CFR 21.7).

(7) The applicable assurances required by Appendix D of this part.

(c) *Additional documentation.* The Administrator may request additional documentation as needed to support a master plan or system plan, or to comply with other Federal and local requirements as they pertain to the requested plan.

(Secs. 303, 307, 308, 312, and 313, Federal Aviation Act of 1958 (49 U.S.C. 1344, 1348, 1349, 1353, and 1354); sec. 6(c), Dept. of Transportation Act (49 U.S.C. 1655(c)); Airport and Airway Development Act of 1970, as amended (49 U.S.C. 1701 et seq.); sec. 1.47(f)(1), Regulations of the Office of the Secretary of Transportation (49 CFR 1.47(1)); OMB Circular A-95, Revised (41 FR 2052; Jan. 13, 1976))

[Doc. No. 19430, 45 FR 34784, May 22, 1980, as amended by Amdt. 152-13, 46 FR 30809, June 11, 1981]

§ 152.115 Grant agreement: Offer, acceptance, and amendment.

(a) *Offer.* Upon approving a project for airport development, airport master planning, or airport system planning, the Administrator issues a written offer that sets forth the terms, limitations, and requirements of the proposed agreement.

(b) *Acceptance.* The acceptance of an offer or an amendment to a grant agreement must be in writing. The sponsor's or planning agency's attorney must certify that the acceptance complies with all applicable law, and constitutes a legal and binding obligation of the sponsor or planning agency.

(c) *Amendment: Airport development grants.* The maximum obligation of the United States under a grant agreement for an airport development project may be increased by an amendment if—

(1) Except as otherwise provided by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, the maximum obligation

of the United States is not increased by more than 10 percent;

(2) Funds are available for the increase;

(3) The sponsor shows that the increase is justified; and

(4) The change does not prejudice the interest of the United States.

(d) *Reduction of U.S. Share: Airport development grants.* When project work for which costs have been incurred is deleted from a grant agreement, the Administrator reduces the maximum obligation of the United States proportionately, based on the cost or value of the deleted work as shown on the project application.

(e) *Amendment: Airport planning.* A grant agreement for airport planning may be changed if—

(1) The change does not increase the maximum obligation of the United States under the grant agreement; and

(2) The change does not prejudice the interest of the United States.

§ 152.117 Public hearings.

(a) Before submitting a preapplication for Federal assistance for an airport development project involving the location of an airport, an airport runway, or a runway extension, the sponsor must give notice of opportunity for a public hearing, in accordance with paragraph (b) of this section, for the purpose of—

(1) Considering the economic, social, and environmental effects of the location of the airport, the airport runway, or the runway extension; and

(2) Determining the consistency of the location with the goals and objectives of any urban planning that has been carried out by the community.

(b) The notice of opportunity for public hearing must—

(1) Include a concise statement of the proposed development;

(2) Be published in a newspaper of general circulation in the communities in or near which the project may be located;

(3) Provide a minimum of 30 days from the date of the notice for submission of requests for a hearing by persons having an interest in the economic, social, or environmental effects of the project; and

(4) State that a copy is available of the sponsor's environmental assessment, if one is required by Appendix 6 of FAA Order 1050.1C, "Policies and Procedures for Considering Environmental Impacts" (45 FR 2244; Jan. 10, 1980), and FAA Order 5050.4, "Airport Environmental Handbook" (45 FR 56624; Aug. 25, 1980), and will remain available, at the sponsor's place of business for examination by the public for a minimum of 30 days, beginning with the date of the notice, before any hearing held under the notice.

(c) A public hearing must be provided if requested. If a public hearing is to be held, the sponsor must publish a notice of that fact, in the same newspaper in which the notice of opportunity for a hearing was published.

(d) The notice required by paragraph (c) of this section must—

(1) Be published not less than 15 days before the date set for the hearing;

(2) Specify the date, time, and place of the hearings;

(3) Contain a concise description of the proposed project; and

(4) Indicate where and at what time more detailed information may be obtained.

(e) If a public hearing is held, the sponsor must—

(1) Provide the Administrator a summary of the issues raised, the alternatives considered, the conclusion reached, and the reasons for that conclusion; and

(2) If requested by the Administrator before the hearing, prepare a verbatim transcript of the hearing for submission to the Administrator.

(f) If a hearing is not held the sponsor must submit with its preapplication a certification that notice of opportunity for a hearing has been provided in accordance with this section and that no request for a public hearing has been received.

[Doc. No. 19430, 45 FR 34784, May 22, 1980, as amended by Amdt. 152-11, 45 FR 56622, Aug. 25, 1980]

§ 152.119 Contract requirements and procurement standards.

To the extent applicable, all grant agreements, contracts, and subcontracts involving airport development projects or airport planning must be in accordance with the contract requirements in Appendices A and C, as applicable, and the procurement standards in Attachment O of Office of Management and Budget Circular A-102 (42 FR 45828).

Subpart C—Funding of Approved Projects

SOURCE: Docket No. 19430, 45 FR 34789, May 22, 1980, unless otherwise noted.

§ 152.201 Applicability.

This subpart contains the requirements for funding projects for airport development, airport master planning, and airport system planning.

§ 152.203 Allowable project costs.

(a) *Airport development.* To be an allowable project cost, for the purposes of computing the amount of an airport development grant, an item that is paid or incurred must, in the opinion of the Administrator—

(1) Have been necessary to accomplish airport development in conformity with—

(i) The approved plans and specifications for an approved project; and

(ii) The terms of the grant agreement for the project;

(2) Be reasonable in amount (subject to partial disallowance to the extent the Administrator determines it is unreasonable);

(3) Have been incurred after the date the grant agreement was executed, except that project formulation costs may be allowed even though they were incurred before that date;

(4) Be supported by satisfactory evidence;

(5) Have not been included in an airport planning grant; and

(6) Be a cost determined in accordance with the cost principles for State and local governments in Federal Management Circular 74-4 (39 FR 27133; 43 FR 50977).

(b) *Airport Planning.* To be an allowable project cost, for the purposes of computing the amount of an airport planning grant, an item that is paid or incurred must, in the opinion of the Administrator—

(1) Have been necessary to accomplish airport planning in comformity with an approved project and the terms of the grant agreement for the project;

(2) Be reasonable in amount;

(3) Have been incurred after the date the grant agreement was entered into, except for substantiated and reasonable costs incurred in designing the study effort;

(4) Be supported by satisfactory evidence; and

(5) Be figured in accordance with Federal Management Circular 74-4 (39 FR 27133; 43 FR 50977).

§ 152.205 United States share of project costs.

(a) *Airport development.* Except as provided in paragraphs (b) and (c) of this section, the following is the United States share of the allowable cost of an airport development project approved for the specified year:

(1) 90 percent in the case of grants made from funds for fiscal years 1976, 1977, and 1978, and grants from funds for fiscal year 1980 made after February 17, 1980, for—

(i) Each air carrier airport, other than a commuter service airport, which enplanes less than one quarter of one percent of the total annual passengers enplaned as determined for purposes of making the latest annual apportionment under section 15(a)(3) of the AADA;

(ii) Each commuter service airport; and

(iii) Each general aviation or reliever airport.

(2) 80 percent in the case of grants made from funds for fiscal year 1979 and grants from funds for fiscal year 1980 made before February 18, 1980, for the airports specified in paragraph (a)(1) of this section.

(3) 75 percent in the case of grants made from funds for fiscal years 1976 through 1980 for airports other than those specified in paragraph (a)(1) of this section.

(b) In a State in which the unappropriated and unreserved public lands and nontaxable Indian lands, both individual and tribal, are more than five percent of the total land in that State, the United States' share under paragraph (a) of this section—

(1) Except as provided in paragraph (b)(2) of this section, shall be increased by the smaller of—

(i) 25 percent; or

(ii) A percentage (rounded to the nearest one-tenth of a percent) equal to one-half of the percentage which the area of those lands is of the total land area of the state; and

(2) May not exceed the greater of—

(i) The percentage share determined under paragraph (a) of this section; or

(ii) The percentage share applying on June 30, 1975, as determined under paragraph (b)(1) of this section.

(c) In the case of terminal development, the United States share shall be 50 percent.

(d) *Airport planning.* The United States share of the allowable project costs of an airport planning project shall be—

(1) In the case of an airport master plan, that percent for which a project for airport development at that airport would be eligible;

(2) In the case of an airport system plan, 75 percent.

§ 152.207 Proceeds from disposition of land.

Unless otherwise authorized by the Administrator, when a release has been granted authorizing the sponsor to dispose of land acquired with assistance under Part 151 of this chapter or this part, or through conveyances under the Surplus Property Act, the proceeds realized from the disposal may not be used as matching funds for any airport development project or airport planning grant, but may be used for any other airport purpose.

§ 152.209 Grant payments: General.

(a) An application for a grant payment is made on a form and in a manner prescribed by the Administrator, and must be accompanied by any supporting information, that the FAA needs to determine the allowability of any costs for which payment is requested.

(b) *Methods of payment.* Grant payments to sponsors and planning agencies will be made by—

(1) Letter of credit;

(2) Advance by Treasury check; or

(3) Reimbursement by Treasury checks.

(c) *Letter of credit funding.* Letter of credit funding may not be used unless—

(1) There is or will be a continuing relationship between a sponsor or planning agency and the FAA for at least a 12-month period and the total amount of advances to be received within that period is $120,000 or more;

(2) The sponsor or planning agency has established or demonstrated to the FAA the willingness and ability to establish procedures that will minimize the time elapsing between the transfer of funds and their disbursement by the grantee; and

(3) The sponsor's or planning agency's financial management system meets the standards for fund control and accountability prescribed in Attachment G of Office of Management and Budget Circular A-102 (42 FR 45828).

(d) *Advance by Treasury check.* Advance of funds by Treasury check may be made subject to the following conditions—

(1) The sponsor or planning agency meets the requirements of paragraphs (c)(2) and (3) of this section;

(2) The timing and amount of cash advances are as close as administratively feasible to actual disbursements by the sponsor or planning agency; and

(3) Except as provided in paragraph (e) of this section, in the case of an airport development project, advance payments do not exceed the estimated project costs of the airport development expected to be accomplished within 30 days after the date of the sponsor's application for the advance payment.

(e) No advance payment for airport development projects may be made in an amount that would bring the aggregate amount of all partial payments to more than the lower of the following:

(i) 90 percent of the estimated United States' share of the total estimated cost of all airport development included in the project, but not including contingency items; or

(ii) 90 percent of the maximum obligation of the United States as stated in the grant agreement.

(f) *Reimbursement by Treasury check.* Reimbursement by Treasury check will be made if the sponsor or planning agency does not meet the requirements of paragraphs (c) (2) and (3) of this section.

(g) *Withholding of payments.* Payment to the sponsor or planning agency may be withheld at any time during the grant period under the following circumstances:

(1) The sponsor or planning agency has failed to comply with the program objectives, grant award conditions, or Federal reporting requirements.

(2) The sponsor or planning agency is indebted to the United States and collection of the indebtedness will not impair accomplishment of the objectives of any grant program sponsored by the United States.

(3) The sponsor or planning agency has withheld payment to a contractor to assure satisfactory completion of work. Payment will be made to the sponsor or planning agency when it has made final payment to the contractor, including the amounts withheld.

(h) *Labor violations.* If a contractor or a subcontractor fails or refuses to comply with the labor provisions of a contract under a grant agreement for an airport development project, further grant payments to the sponsor are suspended until—

(1) The violations are corrected;

(2) The Administrator determines the allowability of the project costs to which the violations relate; or

(3) If the violations consist of underpayments to labor, the sponsor furnishes satisfactory assurances to the FAA that restitution has been or will be made to the affected employees.

(i) *Excess payments.* Upon determination of the allowability of all project costs of a project, if it is found that the total of grant payments to the sponsor or planning agency was more than the total United States share of the allowable costs of the project, the sponsor or planning agency shall promptly return the excess to FAA.

§ 152.211 Grant payments: Land acquisition.

If an approved project for airport development includes land acquisition as an item for which payment is requested, the sponsor may apply to the FAA for payment of the United States share of the allowable project costs of the acquisition, after—

(a) The Administrator determines that the sponsor has acquired satisfactory title to the land; or

(b) In the case of a request for advance payment under § 152.209(d), the Administrator is assured that a satisfactory title will be acquired.

§ 152.213 Grant closeout requirements.

(a) *Program income.* Sponsors or planning agencies that are units of local government shall return all interest earned on advances of grant-in-aid funds to the Federal Government in accordance with a decision of the Comptroller General (42 Comp. Gen. 289). All other program income (gross income) earned by grant-supported activities during the grant period shall be retained by the sponsor and, if required by the grant agreement—

(1) Be added to funds committed to the project by the FAA and the sponsor and used to further eligible program objectives; or

(2) Be deducted from the total project cost for the purpose of determining the net costs on which the Federal share of costs will be based.

(b) *Financial reports.* The sponsor or planning agency shall furnish, within 90 days after completion of all items in a grant, all reports, including financial performance reports, required as a condition of the grant.

(c) *Project completion.* When the project for airport development or planning is completed in accordance with the grant agreement, the sponsor or planning agency may apply for payment for all incurred costs, as follows:

(1) *Airport development.* When allowability of costs can be determined under § 152.203, payment may be made to the sponsor if—

(i) A final inspection of all work at the airport site has been made jointly by the appropriate FAA office and representatives of the sponsor and the contractor, unless that office agrees to a different procedure for final inspection; and

(ii) The sponsor has furnished final "as constructed" plans, unless otherwise agreed to by the Administrator.

(2) *Airport planning.* When the final planning report has been received and accepted by the FAA.

(d) *Property accounting reports: Airport development projects.* The sponsor of an airport development project shall account for any property acquired with grant funds or received from the United States, in accordance with the provisions of Attachment N of Office of Management and Budget Circular A-102 (42 FR 45828).

(e) *Final determination of U.S. share.* Based upon an audit or other information considered sufficient in lieu of an audit, the Administrator determines the total amount of the allowable project costs and makes settlement for any adjustments to the Federal share of costs.

Subpart D—Accounting and Reporting Requirements

SOURCE: Docket No. 19430, 45 FR 34791, May 22, 1980, unless otherwise noted.

§ 152.301 Applicability.

This subpart contains accounting and reporting requirements applicable to—

(a) Each sponsor of a project for airport development;

(b) Each sponsor of a project for airport master planning; and

(c) Each planning agency conducting a project for airport system planning.

§ 152.303 Financial management system.

Each sponsor or planning agency shall establish and maintain a financial management system that meets the standards of Attachment G of Office of Management and Budget Circular A-102 (42 FR 45828).

§ 152.305 Accounting records.

(a) *Airport development.* Each sponsor of a project for airport development shall establish and maintain, for each individual project, an accounting record satisfactory to the Administrator which segregates cost information into the cost classifications set forth in Standard Form 271 (42 FR 45841).

(b) *Airport planning.* Each sponsor of a project for airport master planning and each planning agency conducting a project for airport system planning shall establish and maintain, for each planning project, an adequate accounting record that segregates and groups direct and indirect cost information in the following classifications:

(1) Third party contract costs.

(2) Force account costs.

(3) Administrative costs.

§ 152.307 Retention of records.

Each sponsor or planning agency shall retain, for a period of 3 years after the date of submission of the final expenditure report—

(a) Documentary evidence, such as invoices, cost estimates, and payrolls, supporting each item of project costs; and

(b) Evidence of all payments for items of project costs, including vouchers, cancelled checks or warrants, and receipts for cash payments.

§ 152.309 Availability of sponsor's records.

(a) The sponsor or planning agency shall allow any authorized representative of the Administrator, the Secretary of Transportation, or the Comptroller General of the United States access to any of its books, documents, papers, and records that are pertinent to grants received under this part for the purposes of accounting and audit.

(b) The sponsor or planning agency shall allow appropriate FAA or DOT representatives to make progress audits at any time during the project, upon reasonable notice to the sponsor or planning agency.

(c) It audit findings have not been resolved, the applicable records shall be retained by the sponsor or planning agency until those findings have been resolved.

(d) Records for nonexpendable property that was acquired with Federal funds shall be retained for three years after final disposition of the property.

(e) Microfilm copies of original records may be substituted for original records with the approval of the FAA.

(f) If the FAA determines that certain records have long-term retention value, the FAA may require transfer of custody of those records to the FAA.

§ 152.311 Availability of contractor's records.

The sponsor or planning agency shall include in each contract of the cost reimbursable type a clause that allows any authorized representative of the Administrator, the Secretary of Transportation, or the Comptroller General of the United States access to the contractor's records pertinent to the contract for the purposes of accounting and audit.

§ 152.313 Property management standards.

(a) The sponsor shall establish and maintain property management standards in accordance with Attachment N of Office of Management and Budget Circular A-102 (42 FR 45828) for the utilization and disposition of property furnished by the Federal Government, or acquired in whole or in part by the sponsor with Federal funds.

(b) A sponsor may use its own property management standards and procedures as long as the standards required by paragraph (a) of this section are included.

§ 152.315 Reporting on accrual basis.

(a) Except as provided in paragraph (b) of this section each sponsor or planning agency shall submit all financial reports on an accrual basis.

(b) If records are not maintained on an accrual basis by a sponsor or planning agency, reports may be based on an analysis of records or best estimates.

§ 152.317 Report of Federal cash transactions.

When funds are advanced to a sponsor or planning agency by Treasury check, the sponsor or planning agency shall submit the report form prescribed by the Administrator within 15 working days following the end of the quarter in which check was received.

§ 152.319 Monitoring and reporting of program performance.

(a) The sponsor or planning agency shall monitor performance under the project to ensure that—

(1) Time schedules are being met;

(2) Work units projected by time periods are being accomplished; and,

(3) Other performance goals are being achieved.

(b) Reviews shall be made for—

(1) Each item of development or work element included in the project; and

(2) All other work to be performed as a condition of the grant agreement.

(c) *Airport development.* Unless otherwise requested by the Administrator, the sponsor of a project for airport development shall submit a performance report, on an annual basis, that must include—

(1) A comparison of actual accomplishments to the goals established for the period, made, if applicable, on a quantitative basis related to cost data for computation of unit costs;

(2) The reasons for slippage in each case where an established goal was not met; and

(3) Other pertinent information including, when appropriate, an analysis and explanation of each cost overrun and high unit cost.

(d) *Airport planning.* The sponsor of a project for airport master planning or a planning agency conducting a project for airport system planning shall submit a performance report, on a quarterly basis, that must include:

(1) A comparison of actual accomplishments to the goals established for the period, made, if applicable, on a quantitative basis related to costs for computation of work element costs;

(2) Reasons for slippage in each case where an established goal was not met; and

(3) Other pertinent information including, when appropriate, an analysis and explanation of each cost overrun and high work element cost.

§ 152.321 Notice of delay or acceleration.

(a) The sponsor or planning agency shall promptly notify the FAA of each condition or event that may delay or accelerate accomplishment of the project.

(b) In the event that delay is anticipated, the notice required by paragraph (a) of this section must include—

(1) A statement of actions taken or contemplated; and

(2) Any Federal assistance needed.

§ 152.323 Budget revision: Airport development.

(a) If any performance review conducted by the sponsor discloses a need for change in the budget estimates, the sponsor shall submit a request for budget revision on a form prescribed by the Administrator.

(b) A request for prior approval for budget revision shall be made promptly by the sponsor whenever—

(1) The revision results from changes in the scope or objective of the project; or

(2) The revision increases the budgeted amounts of Federal funds needed to complete the project.

(c) The sponsor shall promptly notify the FAA whenever the amount of the grant is expected to exceed the needs of the sponsor by more than $5,000, or 5 percent of the grant amount, whichever is greater.

§ 152.325 Financial status report: Airport planning.

Each sponsor of a project for airport master planning and each planning agency conducting a project for airport system planning shall submit a financial status report on a form prescribed by the Administrator at the completion of the project.

Subpart E—Nondiscrimination in Airport Aid Program

AUTHORITY: Sec. 30 of the Airport and Airway Development of Act of 1970 (49 U.S.C. 1730); sec. 1.47(f)(1) of the Regulations of the Office of the Secretary of Transportation (49 CFR 1.47(f)(1)).

SOURCE: Docket No. 16419, 45 FR 10188, Feb. 14, 1980, unless otherwise noted.

§ 152.401 Applicability.

(a) This subpart is applicable to all grantees and other covered organizations under this part, and implements the requirements of section 30 of the Airport and Airway Development Act of 1970, which provides:

> The Secretary shall take affirmative action to assure that no person shall, on the grounds of race, creed, color, national origin, or sex, be excluded from participating in any activity conducted with funds received from any grant made under this title. The Secretary shall promulgate such rules as he deems necessary to carry out the purposes of this section and may enforce this section, and any rules promulgated under this section, through agency and department provisions and rules which shall be similar to those established and in effect under Title VI of the Civil Rights Act of 1964. The provisions of this section shall be considered to be in addition to and not in lieu of the provisions of Title VI of the Civil Rights Act of 1964.

(b) Each grantee, covered organization, or covered suborganization under this part shall negotiate reformation of any contract, subcontract, lease, sublease, or other agreement to include any appropriate provision necessary to effect compliance with this subpart by July 17, 1980.

§ 152.403 Definitions.

As used in this subpart—

"AADA" means the Airport and Airway Development Act of 1970, as amended (49 U.S.C. 1701 *et seq.*).

"Affirmative action plan" means a set of specific and result-oriented procedures to which a sponsor, planning agency, state, or the aviation related activity on an airport commits itself to achieve equal employment opportunity.

"Airport development" means—(1) Any work involved in constructing, improving, or repairing a public airport or portion thereof, including the removal, lowering, relocation, and marking and lighting of airport hazards, and including navigation aids used by aircraft landing at, or taking off from, a public airport, and including safety equipment required by rule or regulation for certification of the airport under section 612 of the Federal Aviation Act of 1958, and security equipment required of the sponsor by the

Secretary by rule or regulation for the safety and security of persons and property on the airport, and including snow removal equipment, and including the purchase of noise suppressing equipment, the construction of physical barriers, and landscaping for the purpose of diminishing the effect of aircraft noise on any area adjacent to a public airport;

(2) Any acquisition of land or of any interest therein, or of any easement through or other interest in airspace, including land for future airport development, which is necessary to permit any such work or to remove or mitigate or prevent or limit the establishment of, airport hazards; and

(3) Any acquisition of land or of any interest therein necessary to insure that such land is used only for purposes which are compatible with the noise levels of the operation of a public airport.

"Aviation related activity" means a commercial enterprise—(1) Which is operated on the airport pursuant to an agreement with the grantee or airport operator or to a derivative subagreement;

(2) Which employs persons on the airport; and

(3) Which—(i) Is related primarily to the aeronautical activities on the airport;

(ii) Provides goods or services to the public which is attracted to the airport by aeronautical activities;

(iii) Provides services or supplies to other aeronautical related or public service airport businesses or to the airport; or

(iv) Performs construction work on the airport.

"Aviation workforce" includes, with respect to grantees, each person employed by the grantee on an airport or, for an aviation purpose, off the airport.

"Covered organization" means a grantee, a subgrantee, or an aviation related activity.

"Covered suborganization" is a subgrantee or sub-aviation related activity, of a covered organization.

"Department" means the United States Department of Transportation;

"Grant" means Federal financial assistance in the form of funds provided to a sponsor, planning agency, or state under this part;

"Grantee" means the recipient of a grant.

"Minority" means a person who is—(1) Black and not of Hispanic origin: A person having origins in any of the black racial groups of Africa;

(2) Hispanic: A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race;

(3) Asian or Pacific Islander: A person having origins in any or the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands, including, but not limited to China, Japan, Korea, the Philippine Islands, and Samoa; or

(4) American Indian or Alaskan Native: A person having origins in any of the original peoples of North America who maintains cultural identification through tribal affiliation or community recognition.

"Planning agency" means any planning agency designated by the Secretary which is authorized by the laws of the State or States (including the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands, and Guam) or political subdivisions concerned to engage in areawide planning for the area in which assistance under this part is to be used;

"Secretary" means the Secretary of Transportation or an authorized representative of the Secretary within the Department of Transportation;

"SMSA" means Standard Metropolitan Statistical Area.

"Sponsor" means any public agency that, either individually or jointly with one or more other public agencies, submits to the Administrator, in accordance with this part, an application for financial assistance, or that conducts a project for airport development or airport master planning, funded under this part;

"Underutilization" means having fewer minorities or women in a particular job group than would reasonable be expected from their availability in—

(1) The SMSA; or

(2) In the absence of a defined SMSA, in the counties contiguous to the employer's location, or the location where the work is to be performed, and in the areas from which persons may reasonably be expected to commute.

§ 152.405 Assurances.

The following assurances shall be included in each application for financial assistance under this part:

(a) *Assurance.* The grantee assures that it will undertake an affirmative action program, as required by 14 CFR Part 152, Subpart E, to ensure that no person shall, on the grounds of race, creed, color, national origin, or sex, be excluded from participating in any employment, contracting, or leasing activities covered in 14 CFR Part 152, Subpart E. The grantee assures that no person shall be excluded, on these grounds, from participating in or receiving the services or benefits of any program or activity covered by this subpart. The grantee assures that it will require that its covered organizations provide assurances to the grantee that they similarly will undertake affirmative action programs and that they will require assurances from their suborganizations, as required by 14 CFR Part 152, Subpart E, to the same effect.

(b) *Assurance.* The grantee agrees to comply with any affirmative action plan or steps for equal employment opportunity required by 14 CFR Part 152, Subpart E, as part of the affirmative action program, and by any Federal, State, or local agency or court, including those resulting from a conciliation agreement, a consent decree, court order, or similar mechanism. The grantee agrees that State or local affirmative action plans will be used in lieu of any affirmative action plan or steps required by 14 CFR Part 152, Subpart E, only when they fully meet the standards set forth in 14 CFR 152.409. The grantee agrees to obtain a similar assurance from its covered organizations, and to cause them to require a similar assurance of their covered suborganizations, as required by 14 CFR Part 152, Subpart E.

§ 152.407 Affirmative action plan: General.

(a) Except as provided in paragraph (b) of this section, each of the following shall have an affirmative action plan that meets the requirements of § 152.409 and is kept on file for review by the FAA Office of Civil Rights:

(1) Each sponsor who employs 50 or more employees in its aviation workforce.

(2) Each planning Agency which employs 50 or more employees in its agency for aviation purposes.

(3) Each state political division, administering a grant under the AADA to develop standards for airport development at general aviation airports, which employs 50 or more employees in its aviation workforce.

(b) A grantee is in compliance with paragraph (a) of this section, if it is subject to, and keeps on file for review by the FAA Office of Civil Rights, one of the following:

(1) An affirmative action plan acceptable to another Federal agency.

(2) An affirmative action plan for a State or local agency that the covered organization certifies meets the standards in § 152.409.

(3) A conciliation agreement, consent decree, or court order which provides short and long-range goals for equal employment opportunity similar to those which would be established in an affirmative action plan meeting the standards in § 152.409.

(c) Each sponsor shall require each aviation related activity (other than construction contractors) which employs 50 or more employees on the airport to prepare, and keep on file for review by the FAA Office of Civil Rights, an affirmative action plan developed in accordance with the standards in § 152.409, unless the activity is subject to one of the mechanisms described in paragraphs (b) (1) through (3) of this section.

(d) Each sponsor shall require each aviation related activity described in paragraph (c) of this section to similarly require each of its covered suborganizations (other than construction contractors) which employs 50 or more employees on the airport to prepare, and to keep on file for review by the FAA Office of Civil Rights, an affirmative action plan developed in accordance with the standards in § 152.409, unless the suborganization is subject to one of the mechanisms described in paragraphs (b) (1) through (3) of this section.

§ 152.409 Affirmative action plan standards.

(a) Each affirmative action plan required by this subpart shall be developed in accordance with the following:

(1) An analysis of the employer's aviation workforce which groups employees into the following job categories:

(i) Officials and managers.

(ii) Professionals.

(iii) Technicians.

(iv) Sales workers.

(v) Office and clerical workers.

(vi) Craft workers (skilled).

(vii) Operatives (semi-skilled).

(viii) Laborers (unskilled).

(ix) Service workers.

(2) A comparison separately made of the percent of minorities and women in the employer's present aviation workforce (in each of the job categories listed in paragraph (a)(1) of this section) with the percent of minorities and women in each of those categories in the total workforce located in the SMSA, or, in the absence of an SMSA, in the counties contiguous to the employer's location or the location where the work is to be performed and in the areas from which persons may reasonably be expected to commute. This data on the total workforce of the applicable area will be supplied to grantees by the FAA. Grantees shall make this data available to the other organizations covered by this subpart. The comparison for minorities must be made only when minorities constitute at least 2 percent of the total workforce in the geographical area used for the comparison.

(3) A comparison, for the aviation workforce, of the total number of applicants and persons hired with the total number of minority and female applicants, and minorities and females hired, for the past year. Where this data is unavailable, the employer shall establish and maintain a system to provide the data, and shall make the comparison 120 days after establishing the data system.

(4) Where the percentage of minorities and women in the employer's aviation workforce, in each job category, is less than the minority and female percentage in any job category in the workforce of the geographical area used, an analysis, based on the comparison required by paragraph (a)(3) of this section, determining whether any of the following exists:

(i) Insufficient flow of minority and female applicants.

(ii) Disparate rejection of minority and female applicants. The FAA generally considers disparate rejection to exist whenever a selection rate for any race, sex, or ethnic group is less than 80 percent of the rate for the race, sex, or ethnic group with the highest selection rate.

(b) Each affirmative action plan required by this part shall be implemented through an action-oriented program with goals and timetables designed to eliminate obstacles to equal opportunity for women and minorities in recruitment and hiring, which shall include, but not be limited to:

(1) Where disparate rejection of minority and female applicants is indicated by the analysis required by paragraph (a)(4) of this section, validation of those portions of the testing or selection procedures which cause the disparity in accordance with the "Uniform Guidelines on Employee Selection" (43 FR 38290; August 25, 1978), within 120 days of the analysis.

(2) Where testing or selection procedures cannot be validated, discontinuation of their use.

(3) Where an insufficient flow of minority and female applicants (less than the percentage available) is indicated by the analysis required by paragraph (a)(4) of this section, good faith efforts to increase the flow of minority and female applicants through the following steps, as appropriate:

(i) Development or reaffirmation of an equal opportunity policy and dissemination of that policy internally and externally.

(ii) Contact with minority and women's organizations, schools with predominant minority or female enrollments, and other recruitment sources for minorities and women.

(iii) Encouragement of State and local employment agencies, unions, and other recruiting sources to ensure that minorities and women have ample information on, and opportunity to apply for, vacancies and to participate in examinations.

(iv) Participation in special employment programs such as Co-operative Education Programs with predominantly minority and women's colleges, "After School" or Work Study programs, and Summer Employment.

(v) Participation in "Job Fairs."

(vi) Participation of minority and female employees in Career Days, Youth Motivation Programs, and counseling and related activities in the community.

(vii) Encouragement of minority and female employees to refer applicants.

(viii) Motivation, training, and employment programs for minority and female hard-core unemployed.

§ 152.411 Affirmative action steps.

(a) Each grantee which is not described in § 152.407(a) and is not subject to an affirmative action plan, regulatory goals and timetables, or other mechanism providing for short and long-range goals for equal employment opportunity, shall make good faith efforts to recruit and hire minorities and women for its aviation workforce as vacancies occur, by taking the affirmative action steps in § 152.409(b)(3), as follows:

(1) If it has 15 or more employees in its aviation workforce or employed for aviation purposes, by taking the affirmative action steps in § 152.409(b)(3), as appropriate; or

(2) If it has less than 15 employees in its aviation workforce or employed for aviation purposes, by taking the affirmative action steps in § 152.409(b)(3) (i) and (ii), as appropriate.

(b) Except as provided in paragraph (c) of this section, each sponsor shall require each of its aviation related activities on its airport, that is not subject to an affirmative action plan, regulatory goals and timetables, or other mechanism which provides short and long-range goals for equal employment opportunity, to take affirmative action steps and cause them to similarly require affirmative action steps of their covered suborganizations, as follows:

(1) Each aviation related activity or covered suborganization with less than 50 but more than 14 employees, must take the affirmative action steps enumerated in § 152.409(b)(3), as appropriate.

(2) Each aviation related activity or covered suborganization with less than 15 employees, must take the affirmative action steps enumerated in § 152.409(b)(3) (i) and (ii), as appropriate.

(c) Each sponsor shall require each construction contractor, that has a contract of $10,000 or more on its airport and that is not subject to an affirmative action plan, regulatory goals or timetables, or other mechanism which provides short and long-range goals for equal employment opportunity, to take the following affirmative action steps:

(1) The contractor must establish and maintain a current list of minority and female recruitment sources; provide written notification to these recruitment sources and to community organizations when employment opportunities are available; and maintain a record of each organization's response.

(2) The contractor must maintain a current file of the names, addresses, and telephone numbers of each minority and female walk-in applicant and each referral from a union, a recruitment source, or community organization and the action taken with respect to each individual. Where an individual is sent to the union hiring hall for referral, but not referred back to the contractor, or, if referred, not employed by the contractor, this shall be documented. The documentation shall include an explanation of, and information on, any additional actions that the contractor may have taken.

(3) The contractor must disseminate its equal employment opportunity policy internally—

(i) By providing notice of the policy to unions and training programs;

(ii) By including it in policy manuals and collective bargaining agreements;

(iii) By publicizing it in the company newspaper, report, or other publication; and

(iv) By specific review of the policy with all management personnel and with all employees at least once a year.

(4) The contractor must disseminate the contractors's equal employment opportunity policy externally—

(i) By stating it in each employment advertisement in the news media, including news media with high minority and female readership; and

(ii) By providing written notification to, or participating in discussions with, other contractors and subcontractors with whom the contractor does business.

(5) The contractor must direct its recruitment efforts to minority and female organizations, to schools with minority and female students, and to organizations which recruit and train minorities and women, in the contractor's recruitment area.

(6) The contractor must encourage present minority and female employees to recruit other minorities and women.

(7) The contractor must, where possible, provide after school, summer, and vacation employment to minority and female youth.

(d) Each sponsor shall require each of its prime construction contractors on its airport, with a contract of $10,000 or more, to require each of the contractor's subcontractors on the airport to comply with the affirmative action steps in paragraph (c) of this section, with which it does not already comply, unless the subcontractor is subject to an affirmative action plan, regulatory goals or timetables, or other mechanism which provides short and long-range goals for equal employment opportunity, or the subcontract is less than $10,000.

§ 152.413 Notice requirement.

Each grantee shall give adequate notice to employees and applicants for employment, through posters provided by the Secretary, that the FAA is committed to the requirements of section 30 of the AADA, to ensure that no person shall, on the grounds of race, creed, color, national origin, or sex, be excluded from participating in any activity conducted with funds authorized under this part.

§ 152.415 Records and reports.

(a) Each grantee shall keep on file for a period of three years or for the period during which the Federal financial assistance is made available, whichever is longer, reports (other than those transmitted to the FAA), records, and affirmative action plans, if applicable, that will enable the FAA Office of Civil Rights to ascertain if there has been and is compliance with this subpart.

(b) Each sponsor shall require its covered organizations to keep on file, for the period set forth in paragraph (a) of this section, reports (other than those submitted to the FAA), records, and affirmative action plans, if applicable, that will enable the FAA Office of Civil Rights to ascertain if there has been and is compliance with this subpart, and shall cause them to require their covered suborganizations to keep similar records as applicable.

(c) Each grantee, employing 15 or more person, shall annually submit to the FAA a compliance report on a form provided by the FAA and a statistical report on a Form EEO-1 of the Equal Employment Opportunity Commission (EEOC) or any superseding EEOC form. If a grantee already is submitting a Form EEO-1 to another agency, the grantee may submit a copy of that form to the FAA as its statistical report. The information provided shall include goals and timetables, if established in compliance with the requirements of § 152.409 or with the requirements of another Federal agency or a State or local agency.

(d) Each sponsor shall—

(1) Require each of its aviation-related activities (except construction contractors), employing 15 or more persons, to annually submit to the sponsor the reports required by paragraph (c) of this section, on the same basis as stated in paragraph (c) of this section, and shall cause each aviation-related activitiy to require its covered suborganizations, with 15 or more employees, to annually submit the reports required by paragraph (c) of this section

through the prime organization to the sponsor, for transmittal by the sponsor to the FAA.

(2) Annually collect from its aviation related activities employing less than 15 employees, and transmit to the FAA an aggregate employment report, that includes the employment of sponsors with less than 15 employees, on an EEO-1 or any superseding EEOC form.

(e) Each sponsor shall require each of its construction contractors on its airport, with a contract of $10,000 or more, which is not subject to E.O. 11246 and the regulations of the Department of Labor (DOL), to submit to the sponsor, at the conclusion of the project, a compliance report on a form provided by the FAA and a statistical report on a DOL Form 257 or any superseding DOL form. For projects exceeding six months, the sponsor shall require a midway compliance report. The sponsor shall submit these reports to the FAA.

(f) Each sponsor shall cause each of its construction contractors on its airport to require each of the contractor's subcontractors, with a subcontract of $10,000 or more, which are not subject to E.O. 11246 and the regulations of the DOL, to submit the reports required by paragraph (e) of this section to the prime contractor for submission to the sponsor. The sponsor shall transmit these reports to the FAA.

(g) Each organization required to prepare an affirmative action plan for the FAA under this subpart shall update it annually and as changed circumstances require. Each organization that has prepared a plan in compliance with the requirements of another Federal agency or a State or local agency, shall update it in accordance with the requirements of that agency.

§ 152.417 Monitoring employment.

(a) Each grantee shall allow the FAA Office of Civil Rights to monitor its equal employment opportunity compliance with this subpart through on-site reviews and desk audits. Reviews or audits will include the records submitted under § 152.415.

(b) As it deems necessary, the FAA Office of Civil Rights will conduct on-site or desk audits of covered aviation related activities on airports.

§ 152.419 Minority business.

Each person subject to this subpart is required to comply with the Minority Business Enterprise Regulations of the Department.

§ 152.421 Public accommodations, services, and benefits.

Requirements relating to the provision of public accommodations, services, and other benefits to beneficiaries under Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d *et seq.*) and Part 21 of the regulations of the Office of the Secretary of Transportation (49 CFR Part 21) implementing Title VI are made applicable, where appropriate, to nondiscrimination and affirmative action on the basis of sex or creed, and shall be complied with by each applicant for assistance and each grantee.

§ 152.423 Investigation and enforcement.

(a) *Complaints.* Any person who believes that he or she has been subjected to discrimination prohibited by this subpart may personally, or through a representative, file a complaint with the Director of the Departmental Office of Civil Rights. A complaint must be in writing and filed not later than 180 days after the date of the alleged discrimination, unless the time for filing is extended by the Director.

(b) *Investigations and informal resolutions.* The Departmental Office of Civil Rights will make a prompt investigation whenever a complaint, compliance review, report, or any other information indicates a possible failure to comply with this subpart. The procedures in 49 CFR Part 21, augmented as appropriate by the investigative procedures of Part 13 of this chapter, will be followed, except that—

(1) Compliance with a regulation of the Department applicable to minority business enterprise will be investigated and enforced through the procedures contained in that regulation; and

(2) Except as provided in paragraph (c) of this section, allegations of noncompliance with regulations governing equal employment opportunity of an-

other Federal agency or a State or local agency, will be referred, for investigation and enforcement, to the Federal agency or, in the discretion of the Departmental Office of Civil Rights, to the State or local agency.

(c) When the FAA (under section 30 of the AADA) and another Federal agency, a referral agency recognized by the Equal Employment Opportunity Commission, or a court have concurrent jurisdiction over a matter—

(1) If the other agency or court makes a finding on the record that noncompliance or discrimination has occurred, the FAA will accept the finding, and determine what sanctions or remedies are appropriate under section 30 as a result of the finding, after permitting the party against whom the finding was made to be heard on the determination of the sanctions or remedies; or

(2) If it appears that delay, through referral to another agency, will result in the continued expenditure of Federal funds under this part without compliance with this subpart, the Secretary may—

(i) Investigate the matter;

(ii) Make a determination as to compliance with section 30; and

(iii) Impose appropriate sanctions and remedies.

(d) Nothing in this section shall preclude the Director of the Departmental Office of Civil Rights from initiating an investigation when it appears that the investigation of the complaint may reveal a pattern or practice of discrimination or noncompliance with the requirements of this subpart in the employment practices of a grantee or other covered organization.

§ 152.425 Effect of subpart.

Nothing contained in this subpart diminishes or supersedes the obligations imposed by Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), Executive Order 11246 (42 U.S.C. 2000e (note)), or any other Federal law or Executive Order relating to civil rights.

Subpart F—Suspension and Termination of Grants

SOURCE: Docket No. 19430, 45 FR 34792, May 22, 1980, unless otherwise noted.

§ 152.501 Applicability.

This subpart contains procedures for suspending or terminating grants for airport development projects and airport planning.

§ 152.503 Suspension of grant.

(a) If the sponsor or planning agency fails to comply with the conditions of the grant, the FAA may, by written notice to the sponsor or planning agency, suspend the grant and withhold further payments pending—

(1) Corrective action by the sponsor or planning agency; or

(2) A decision to terminate the grant.

(b) Except as provided in paragraph (c), after receipt of notice of suspension, the sponsor or planning agency may not incur additional obligations of grant funds during the suspension.

(c) All necessary and proper costs that the sponsor or planning agency could not reasonably avoid during the period of suspension will be allowed, if those costs are in accordance with Appendix C of this part.

§ 152.505 Termination for cause.

(a) If the sponsor or planning agency fails to comply with the conditions of the grant, the FAA may, by written notice to the sponsor or planning agency, terminate the grant in whole, or in part.

(b) The notice of termination will contain—

(1) The reasons for the termination, and

(2) The effective date of termination.

(c) After receipt of the notice of termination, the sponsor or planning agency may not incur additional obligations of grant funds.

(d) Payments to be made to the sponsor or planning agency, or recoveries of payments by the FAA, under the grant shall be in accordance with the legal rights and liabilities of the parties.

§ 152.507 Termination for convenience.

(a) When the continuation of the project would not produce beneficial results commensurate with the further expenditure of funds, the grant may be terminated in whole, or in part, upon mutual agreement of the FAA and the sponsor or planning agency.

(b) If an agreement to terminate is made, the sponsor or planning agency—

(1) May not incur new obligations for the terminated portion after the effective date; and

(2) Shall cancel as many obligations, relating to the terminated portion, as possible.

(c) The sponsor or planning agency is allowed full credit for the Federal share of the noncancellable obligations that were properly incurred by the sponsor before the termination.

§ 152.509 Request for reconsideration.

If a grant is suspended or terminated under this subpart, the sponsor or planning agency may request the Administrator to reconsider the suspension or termination.

Subpart G—Energy Conservation in Airport Aid Program

AUTHORITY: Secs. 1-27, 84 Stat. 220-223 (49 U.S.C. 1711-1727); sec. 1.47(g), Regulations of the Office of the Secretary of Transportation; 35 FR 17044; sec. 403(b), 92 Stat. 3318; E.O. 12185, unless otherwise noted.

SOURCE: Docket No. 66, 45 FR 58035, Aug. 29, 1980, unless otherwise noted.

§ 152.601 Purpose.

This subpart implements section 403 of the Powerplant and Industrial Fuel Use Act of 1978 (92 Stat. 3318; Pub. L. 95-620) in order to encourage conservation of petroleum and natural gas by recipients of Federal financial assistance.

§ 152.603 Applicability.

This subpart applies to each recipient of Federal financial assistance from the Federal Aviation Administration through the Airport Development Aid Program (ADAP) unless otherwise excluded by definition.

§ 152.605 Definitions.

As used in this subpart—

"Building construction" means construction of any building which receives Federal assistance under the program, which will exceed $200,000 in construction cost.

"Energy Assessment" means an analysis of total energy requirements of a building, which, within the scope of the proposed construction activity, and at a level of detail appropriate to that scope, considers the following:

(a) Overall design of the facility or modification, and alternative designs;

(b) Materials and techniques used in construction or rehabilitation;

(c) Special or innovative conservation features that may be used;

(d) Fuel requirements for heating, cooling, and operations essential to the function of the structure, projected over the life of the facility and including projected costs of this fuel; and

(e) Kind of energy to be used, including—

(1) Consideration of opportunities for using fuels other than petroleum and natural gas, and

(2) Consideration of using alternative, renewable energy sources.

"Major Building Modification" means modification of any building which receives Federal assistance under the program, which will exceed $200,000 in construction cost.

§ 152.607 Building design requirements.

Each sponsor shall perform an energy assessment for each Federally-assisted building construction or major building modification project proposed at the airport. The building design, construction, and operation shall incorporate, to the extent consistent with good engineering practice, the most cost-effective energy conservation features identified in the energy assessment.

§ 152.609 Energy conservation practices.

Each sponsor shall require fuel and energy conservation practices in the operation and maintenance of the airport and shall encourage airport tenants to use these practices.

APPENDIX A—CONTRACT AND LABOR PROVISIONS

This appendix sets forth contract and labor provisions applicable to grants under the Airport and Airway Development Act of 1970.

This appendix does not apply to: (1) Any contract with the owner of airport hazards, buildings, pipelines, powerlines, or other structures or facilities, for installing, extending, changing, removing, or relocating that structure or facility, and (2) any written agreement or understanding between a sponsor and another public agency that is not a sponsor of the project, under which the public agency undertakes construction work for or as agent of the sponsor.

I. Contract Provisions Required by the Regulations of the Secretary of Labor

Each sponsor entering into a construction contract for an airport development project shall insert in the contract and any supplemental agreement:

(1) The provisions required by the Secretary of Labor, as set forth in paragraphs A through K;

(2) The provisions set forth in paragraph L, and

(3) Any other provisions necessary to ensure completion of the work in accordance with the grant agreement.

The provisions in paragraphs A through K and provision (5) in paragraph L need not be included in prime contracts of $2,000 or less.

A. Minimum wages. (1) All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act [29 CFR Part 3], the full amounts due at time of payment computed at wage rates not less than those contained in the wage determination decision(s) of the Secretary of Labor which is (are) attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics; and the wage determination decision(s) shall be posted by the contractor at the site of the work in a prominent place where it (they) can be easily seen by the workers. For the purpose of this paragraph, contributions made or costs reasonably anticipated under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (4) below. Also for the purpose of this paragraph, regular contributions made or costs incurred for more than a weekly period under plans, funds, or programs, but covering the particular weekly period, are deemed to be constructively made or incurred during such weekly period (29 CFR 5.5(a)(1)(i)).

(2) Any class of laborers or mechanics, including apprentices and trainees, which is not listed in the wage determination(s) and which is to be employed under the contract, shall be classified or reclassified conformably to the wage determination(s), and a report of the action taken shall be sent by the [insert sponsor's name] to the FAA for approval and transmittal to the Secretary of Labor. In the event that the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers and mechanics, including apprentices and trainees, to be used, the question accompanied by the recommendation of the FAA shall be referred to the Secretary of Labor for final determination (29 CFR 5.5(a)(1)(ii)).

(3) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly wage rate and the contractor is obligated to pay a cash equivalent of such a fringe benefit, an hourly cash equivalent thereof shall be established. In the event the interested parties cannot agree upon a cash equivalent of the fringe benefit, the question accompanied by the recommendation of the FAA shall be referred to the Secretary of Labor for determination (29 CFR 5.5(a)(1)(iii)).

(4) If the contractor does not make payments to a trustee or other third person, he may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing benefits under a plan or program of a type expressly listed in the wage determination decision of the Secretary of Labor which is a part of this contract: *Provided, however,* the Secretary of Labor has found, upon written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program (29 CFR 5.5(a)(1)(iv)).

B. Withholding: FAA from sponsor. Pursuant to the terms of the grant agreement between the United States and [insert sponsor's name], relating to Airport Development Aid Project No. ———, and Part 152 of the Federal Aviation Regulations (14 CFR Part 152), the FAA may withhold or cause to be withheld from the [insert sponsor's name] so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices and trainees, employed by the contractor or any subcontractor on the work the full amount of wages required by this contract. In the event of failure to pay any laborer or mechanics, including any apprentice or trainee, employed or working on the site of the work all or part of the wages required by this contract, the FAA may, after written notice to the [insert sponsor's name], take such action as may be necessary to cause the suspension of any further payment or advance of funds until such violations have ceased (29 CFR 5.5(a)(2)).

C. Payrolls and basic records. (1) Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records will contain the name and address of each such employee, his correct classification, rates of pay (including rates of contributions or costs anticipated of the types described in section 1(b)(2) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found, under 29 CFR 5.5(a)(1)(iv) (see paragraph (4) of paragraph A above), that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits (29 CFR 5.5(a)(3)(i)).

(2) The contractor will submit weekly a copy of all payrolls to the [insert sponsor's name] for availability to the FAA. The copy shall be accompanied by a statement signed by the employer or his agent indicating that the payrolls are correct and complete, that the wage rates contained therein are not less than those determined by the Secretary of Labor and that the classifications set forth for each laborer or mechanic conform with the work he performed. A submission of a "Weekly Statement of Compliance" which is required under this contract and the Copeland regulations of the Secretary of Labor (29 CFR Part 3) and the filing with the initial payroll or any subsequent payroll of a copy of any findings by the Secretary of Labor under 29 CFR 5.5(a)(1)(iv) (see paragraph (4) of paragraph A above), shall satisfy this requirement. The prime contractor shall be responsible for submission of copies of payrolls of all subcontractors. The contractor will make the records required under the labor standards clauses of the contract available for inspection by authorized representatives of the FAA and the Department of Labor, and will permit such representatives to interview employees during working hours on the job. Contractors employing apprentices or trainees under approved programs shall include a notation on the first weekly certified payrolls submitted to the [insert sponsor's name] for availability to the FAA, that their employment is pursuant to an approved program and shall identify the program (29 CFR 5.5(a)(3)(ii)).

D. Apprentices and trainees. (1) *Apprentices.* Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen in any craft classification shall not be greater than the ratio permitted to the contractor as to his entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not a trainee as defined in paragraph (2) of this paragraph or is not registered or otherwise employed as stated above, shall be paid the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The contractor or subcontractor will be required to furnish to the [insert sponsor's name] or a representative of the Wage-Hour Division of the U.S. Department of Labor written evidence of the registration of his program and apprentices as well as the appropriate ratios and wage rates (expressed in percentages of the journeyman hourly rates), for the area of construction prior to using any apprentices on the contract work. The wage rate paid apprentices shall be not less than the appropriate percentage of the journeyman's rate contained in the applicable wage determination (29 CFR 5.5(a)(4)(i)).

(2) *Trainees.* Except as provided in 29 CFR 5.15 trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration, Bureau

of Apprenticeship and Training. The ratio of trainees to journeymen shall not be greater than permitted under the plan approved by the Bureau of Apprenticeship and Training. Every trainee must be paid at not less than the rate specified in the approved program for his level of progress. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Bureau of Apprenticeship and Training shall be paid not less than the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The contractor or subcontractor will be required to furnish the [insert sponsor's name] or a representative of the Wage-Hour Division of the U.S. Department of Labor written evidence of the certification of his program, the registration of the trainees, and the ratios and wage rates prescribed in that program. In the event the Bureau of Apprenticeship and Training withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved (29 CFR 5.5(a)(4)(ii)).

(3) *Equal employment opportunity.* The utilization of apprentices, trainees and journeymen under this paragraph shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30 (29 CFR 5.5(a)(4)(iii)).

(4) *Application of 29 CFR 5.5(a)(4).* On contracts in excess of $2,000 the employment of all apprentices and trainees as defined in 29 CFR 5.2(c) shall be subject to the provisions of 29 CFR 5.5(a)(4) (see paragraph D(1), (2), and (3) above).

E. Compliance with Copeland Regulations. The contractor shall comply with the Copeland Regulations (29 CFR Part 3) of the Secretary of Labor which are herein incorporated by reference (29 CFR 5.5(a)(5)).

F. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of 8 hours in any calendar day or in excess of 40 hours in such workweek unless such laborer or mechanic received compensation at a rate not less than 1½ times his basic rate of pay for all hours worked in excess of 8 hours in any calendar day or in excess of 40 hours in such workweek, as the case may be (29 CFR 5.5(c)(1)).

G. Violations; liability for unpaid wages; liquidated damages. In the event of any violation of paragraph F of this provision, the contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed, with respect to each individual laborer or mechanic employed in violation of said paragraph F of this provision, in the sum of $10 for each calendar day on which such employee was required or permitted to work in excess of 8 hours or in excess of the standard workweek of 40 hours without payment of the overtime wages required by said paragraph F of this provision (29 CFR 5.5(c)(2)).

H. Withholding for unpaid wages and liquidated damages. The FAA may withhold or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in paragraph G of this provision (29 CFR 5.5(c)(3)).

I. Working conditions. No contractor may require any laborer or mechanic employed in the performance of any contract to work in surroundings or under working conditions that are unsanitary, hazardous, or dangerous to his health or safety as determined under construction safety and health standards (29 CFR Part 1926) and other occupational and health standards (29 CFR Part 1910) issued by the Department of Labor.

J. Subcontracts. The contractor will insert in each of his subcontracts the clauses contained in paragraphs A through K of this provision, and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made (29 CFR 5.5(a)(6), 5.5(c)(4)).

K. Contract termination debarment. A breach of clause A, B, C, D, E, or J may be grounds for termination of the contract, and for debarment as provided in § 5.6 of the Regulations of the Secretary of Labor as codified in 29 CFR 5.6 (29 CFR 5.5(a)(7)).

L. Additional contract provisions. (1) *Airport Development Aid Program Project.* The work in this contract is included in Airport Development Aid Program Project No. ——— which is being undertaken and accomplished by the [insert sponsor's name] in accordance with the terms and conditions of a grant agreement between the [insert sponsor's name] and the United States, under the Airport and Airway Development Act of 1970 (84 Stat. 219) and Part 152 of the Federal Aviation Regulations (14 CFR Part 152), pursuant to which the United States has agreed to pay a certain percentage of the costs of the project that are determined to be allowable project costs under that Act. The United States is not a party to this contract and no reference in this contract to the FAA or any representative thereof, or to any rights granted to the FAA or any representative thereof, or the United States, by the contract, makes the United States a party to this contract.

(2) *Consent to assignment.* The contractor shall obtain the prior written consent of the [insert sponsor's name] to any proposed assignment of any interest in or part of this contract.

(3) *Convict labor.* No convict labor may be employed under this contract.

(4) *Veterans preference.* In the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to qualified individuals who have served in the military service of the United States (as defined in section 101(1) of the Soldiers' and Sailors' Civil Relief Act of 1940 (50 U.S.C. App. 501) and have been honorably discharged from the service, except that preference may be given only where that labor is available locally and is qualified to perform the work to which the employment relates.

(5) *Withholding: sponsor from contractor.* Whether or not payments or advances to the [insert sponsor's name] are withheld or suspended by the FAA, the [insert sponsor's name] may withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics employed by the contractor or any subcontractor on the work the full amount of wages required by this contract.

(6) *Nonpayment of wages.* If the contractor or subcontractor fails to pay any laborer or mechanic employed or working on the site of the work any of the wages required by this contract the [insert sponsor's name] may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment or advance of funds until the violations cease.

(7) *FAA inspection and review.* The contractor shall allow any authorized representative of the FAA to inspect and review any work or materials used in the performance of this contract.

(8) *Subcontracts.* The contractor shall insert in each of his subcontracts the provisions contained in paragraphs [insert designation of 6 paragraphs of contract corresponding to paragraphs (1), (3), (4), (5), (6), and (7) of this paragraph], and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

(9) *Contract termination.* A breach of paragraphs [insert designation of 3 paragraphs corresponding to paragraphs (6), (7), and (8) of this paragraph] may be grounds for termination of the contract.

II. Adjustment in Liquidated Damages

A contractor or subcontractor who has become liable for liquidated damages under the provision set out in paragraph I.G of this appendix and who claims that the amount administratively determined as liquidated damages under section 104(a) of the Contract Work Hours and Safety Standards Act is incorrect or that he violated inadvertently the Contract Work Hours and Safety Standards Act, notwithstanding the exercise of due care, may—

(1) If the amount determined is more than $100, apply to the Administrator for a recommendation to the Secretary of Labor that an appropriate adjustment be made or that he be relieved of liability for the liquidated damages; or

(2) If the amount determined is $100 or less, apply to the Administrator for an appropriate adjustment in liquidated damages or for release from liability for the liquidated damages.

III. Corrected Wage Determinations

The Secretary of Labor corrects any wage determination included in any contract under this Appendix whenever the wage determination contains clerical errors. A correction may be made at the Administrator's request or on the initiative of the Secretary of Labor.

IV. Applicability of Interpretations of the Secretary of Labor

When applicable by their terms, the regulations of the Secretary of Labor (29 CFR 5.20-5.32) interpreting the "fringe benefit provisions" of the Davis-Bacon Act apply to the contract provisions in this Appendix.

V. Records

A sponsor who is required to include in a construction contract the labor provisions required by this appendix shall require the contractor to comply with those provisions and shall cooperate with the FAA in effecting that compliance. For this purpose the sponsor shall—

(1) Keep, and preserve, the record described in paragraph IC for a 3-year period beginning on the date the contract is completed, each affidavit and payroll copy furnished by the contractor, and make those affidavits and copies available to the FAA, upon request, during that period;

(2) Have each of those affidavits and payrolls examined by its resident engineer (or any other of its employees or agents who is

qualified to make the necessary determinations), as soon as possible after receiving it, to the extent necessary to determine whether the contractor is complying with the labor provisions required by this appendix and particularly with respect to whether the contractor's employees are correctly classified;

(3) Have investigations made during the performance of work under the contract, to the extent necessary to determine whether the contractor is complying with those labor provisions, including in the investigations, interviews with employees and examinations of payroll information at the work site by the sponsor's resident engineer (or any other of its employees or agents who is qualified to make the necessary determinations);

(4) Keep the appropriate FAA office fully advised of all examinations and investigations made under this appendix, all determinations made on the basis of those examinations and investigations, and all efforts made to obtain compliance with the labor provisions of the contract; and

(5) Give priority to complaints of alleged violations, and treat as confidential any written or oral statements made by any employee in connection with a complaint, and not disclose an employee's statement made in connection with a complaint to a contractor without the employee's consent.

[Doc. No. 19430, 45 FR 34793, May 22, 1980]

APPENDIX B—LIST OF ADVISORY CIRCULARS INCORPORATED BY § 152.11

(a) *Circulars available free of charge.*

Number and Subject

150/5100-12—Electronic Navigational Aids Approved for Funding Under the Airport Development Aid Program (ADAP).

150/5190-3A—Model Airport Hazard Zoning Ordinance.

150/5210-7A—Aircraft Fire and Rescue Communications.

150/5210-10—Airport Fire and Rescue Equipment Building Guide.

150/5300-2C—Airport Design Standards—Site Requirements for Terminal Navigational Facilities.

150/5300-4B—Utility Airports—Air Access to National Transportation.

150/5300-6—Airport Design Standards—General Aviation Airports—Basic and General Transport.

150/5300-8—Planning and Design Criteria for Metropolitan STOL Ports.

150/5320-6B—Airport Pavement Design and Evaluation.

150/5320-10—Environmental Enhancement at Airports—Industrial Waste Treatment.

150/5320-12—Methods for the Design, Construction, and Maintenance of Skid Resistant Airport Pavement Surfaces.

150/5325-2C—Airport Design Standards—Airports Served by Air Carriers—Surface Gradient and Line-of-Sight.

150/5325-4—Runway Length Requirements for Airport Design.

150/5325-6A—Airport Design Standards—Effect and Treatment of Jet Blast.

150/5325-8—Compass Calibration Pad.

150/5335-1A—Airport Design Standards—Airports Served by Air Carriers—Taxiways.

150/5335-2—Airport Aprons.

150/5335-3—Airport Design Standards—Airports Served by Air Carriers—Bridges and Tunnels on Airports.

150/5335-4—Airport Design Standards—Airports Served by Air Carriers—Runway Geometrics.

150/5340-1D—Marking of Paved Areas on Airports.

150/5340-4C—Installation Details for Runway Centerline and Touchdown Zone Lighting Systems.

150/5340-5A—Segmented Circle Airport Marker System.

150/5340-8—Airport 51-foot Tubular Beacon Tower.

150/5340-14B—Economy Approach Lighting Aids.

150/5340-17A—Standby Power for Non-FAA Airport Lighting System.

150/5340-18—Taxiway Guidance Sign System.

150/5340-19—Taxiway Centerline Lighting System.

150/5340-20—Installation Details and Maintenance Standards for Reflective Markers for Airport Runway and Taxiway Centerlines.

150/5340-21—Airport Miscellaneous Lighting Visual Aids.

AC/5340-22—Maintenance Guide for Determining Degradation and Cleaning of Centerline and Touchdown Zone Lights.

150/5340-23A—Supplemental Wind Cones.

150/5340-24—Runway and Taxiway Edge Lighting System.

150/5340-25—Visual Approach Slope Indicator (VASI) Systems.

150/5345-1E—Approved Airport Lighting Equipment.

150/5345-2—Specification for L-810 Obstruction Light.

150/5345-3C—Specification for L-821 Panels for Remote Control of Airport Lighting.

150/5345-4—Specification for L-829 Internally Lighted Airport Taxi Guidance Sign.

150/5345-5—Specification for L-847 Circuit Selector Switch, 5,000 Volt 20 Ampere.

150/5345-7C—Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits.

150/5345-10C—Specification for L-828 Constant Current Regulators.

150/5345-11—Specification for L-812 Static Indoor Type Constant Current Regulator Assembly; 4 KW and 7½ KW, With Brightness Control for Remote Operation.

150/5345-12A—Specification for L-801 Beacon.

150/5345-13—Specification for L-841 Auxiliary Relay Cabinet Assembly for Pilot Control of Airport Lighting Circuits.

150/5345-18—Specification for L-811 Static Indoor Type Constant Current Regulator Assembly, 4 KW; With Brightness Control and Runway Selection for Direct Operation.

150/5345-21—Specification for L-813 Static Indoor Type Constant Current Regulator Assembly; 4 KW and 7½ KW; for Remote Operation of Taxiway Lights.

150/5345-26A—Specification for L-823 Plug and Receptacle, Cable Connectors.

150/5345-27A—Specification for L-807 Eight-foot and Twelve-foot Unlighted or Externally Lighted Wind Cone Assemblies.

150/5345-28C—Specification for L-851 Visual Approach Slope Indicators and Accessories.

150/5345-36—Specification for L-808 Lighted Wind Tee.

150/5345-39A—FAA Specification for L-853, Runway and Taxiway Retroreflective Markers.

150/5345-42A—FAA Specification L-857, Airport Light Bases, Transformer Housings, and Junction Boxes.

150/5345-43B—FAA/DOD Specification L-856, High Intensity Obstruction Lighting Systems.

150/5345-44A—Specification for L-858 Retroreflective Taxiway Guidance Sign.

150/5345-45—Lightweight Approach Light Structure.

150/5345-46—Specification for Semiflush Airport Lights.

150/5345-47—Isolation Transformers for Airport Lighting Systems.

150/5345-48—Specification for Runway and Taxiway Edge Lights.

150/5360-6—Airport Terminal Building Development with Federal Participation.

150/5360-7—Planning and Design Considerations for Airport Terminal Building Development.

150/5370-7—Airport Construction Controls to Prevent Air and Water Pollution.

150/5370-9—Slip-Form Paving—Portland Cement Concrete.

150/5370-11—Use of Nondestructive Testing Devices in the Evaluation of Airport Pavements.

(b) *Circulars for sale.*

Number and Subject

150/5320-5B—Airport Drainage; $1.30.

150/5370-10—Standards for Specifying Construction of Airports; $7.25.

150/5390-1A—Heliport Design Guide; $1.50.

[Doc. No. 19430, 45 FR 34795, May 22, 1980]

APPENDIX C—PROCUREMENT PROCEDURES AND REQUIREMENTS

There is set forth below procurement procedures and requirements applicable to grants for airport development under the Airport and Airway Development Act of 1970.

1. *General.* Each contract under a project must meet the requirements of local law and the requirements and standards contained in this appendix. The sponsor shall establish procedures for procurement of supplies, equipment, construction, and services funded under the project which meet the requirements of Attachment O of Office of Management and Budget (OMB) Circular A-102 (44 FR 47874) and of this appendix. Subject to funding and time limitations, the FAA reviews the sponsor's procurement system to determine whether it may be certified in accordance with Attachment O of OMB Circular A-102.

2. *Out-of-state labor.* No procedure or requirement shall be imposed by any grantee which will operate to discriminate against the employment of labor from any other State, possession, or territory of the United States in the construction of a project.

3. *Bid guarantee.* All bids for construction or facility improvement in excess of $100,000 shall be accompanied by a bid guarantee consisting of a firm commitment such as a bid bond, certified check or other negotiable instrument equivalent to five percent of the bid price as assurance that the bidder will, upon acceptance of his bid, execute such contractual documents as may be required within the time specified.

4. *Construction work.* All construction work under a project must be performed under contract, except in a case where the Administrator determines that the project, or a part of it, can be more effectively and economically accomplished on a force account basis by the sponsor or by another public agency acting for or as agent of the sponsor.

5. *Change order.* Unless otherwise authorized by the Administrator, no sponsor may issue any change order under any of its construction contracts or enter into a supplemental agreement unless three copies of that order or agreement have been sent to, and approved by, the FAA.

6. *Beginning work.* No sponsor may allow a contractor or subcontractor to begin work under a project until—

a. The sponsor has furnished three conformed copies of the contract to the appropriate FAA office;

b. The sponsor has, if applicable, submitted a statement that comparable replacement housing, as defined in § 25.15 of the Regulations of the Office of the Secretary of Transportation, will be available within a reasonable period of time before displacement.

c. The appropriate FAA office has agreed to the issuance of a notice to proceed with the work to the contractor.

7. *Supervision and inspection.* No work will be commenced until the sponsor has provided for adequate supervision and inspection of construction and advised the appropriate FAA office.

8. *Engineering and planning services.* Unless otherwise authorized by the Administrator, each proposal for engineering and planning services shall be reviewed by FAA before the commencement of the development of design plans and specifications.

9. *Advertising general.* Unless the Administrator approves another method for use on a particular airport development project, each contract and supplemental agreement for construction work on a project in the amount of more than $10,000 must be awarded on the basis of public advertising and open competitive bidding under the local law applicable to the letting of public contracts.

10. *Advertising: conditions and contents.* There may be no advertisement for bids on, or negotiation of, a construction contract or supplemental agreement until the Administrator has either approved the plans and specifications or accepted a certification in accordance with § 152.7 that they meet all applicable standards prescribed by this part. The advertisement shall inform the bidders of the equal employment opportunity requirements of Part 152. Unless the estimated contract price or construction cost in $2,000 or less, there may be no advertisement for bids or negotiations until the Administrator has given the sponsor a copy of a decision of the Secretary of Labor establishing the minimum wage rates for skilled and unskilled labor under the proposed contract. In each case, a copy of the wage determination decision, including fringe benefits, must be set forth in the initial invitation for bids or proposed contract, or incorporated therein by reference to a copy set forth in the advertised or negotiated specifications.

11. *Procedures for obtaining wage determinations.* (a) *Specific request for wage determination.* At least 60 days before the intended date of advertising or negotiating of this section, the sponsor shall send to the appropriate FAA office, completed Department of Labor Form DB-11 or DB-11(a), as appropriate, with only the classifications needed in the performance of the work checked. General entries (such as "entire schedule" or "all applicable classifications") may not be used. Additional necessary classifications not on the form may be typed in the blank spaces or on an attached separate list. A classification that can be fitted into classifications on the form, or a classification that is not generally recognized in the area or in the industry, may not be used. Except in areas where the wage patterns are clearly established, the Form must be accompanied by any available pertinent wage payment or locally prevailing fringe benefit information.

(b) *General wage determination.* Whenever the wage patterns in a particular area for a particular type of construction are well settled and whenever it may be reasonably anticipated that there will be a large volume of procurement in that area for that type of construction, the Secretary of Labor, upon the request of a Federal agency or in his discretion, may issue a general wage determination when, after consideration of the facts and circumstances involved, he finds that the applicable statutory standards and those of Part 1, 29 CFR, Subtitle A, will be met. This general wage determination is used for all projects located in the area and for the type of construction covered by the general wage determination.

12. *Advertising: wage determinations.* (a) Wage determinations are effective only for 120 days from the date of the determinations. If it appears that a determination may expire between bid opening and award, the sponsor shall so advise the FAA as soon as possible. If it wishes a new request for wage determination to be made and if any pertinent circumstances have changed, it shall submit the appropriate form of the Department of Labor and accompanying information. If it claims that the determination expires before award and after bid opening due to unavoidable circumstances, it shall submit proof of the facts which it claims support a finding to that effect.

(b) The Secretary of Labor may modify any wage determination before the award of the contract or contracts for which it was sought. If the proposed contract is awarded on the basis of public advertisement and open competitive bidding, any modification that the FAA receives less than 10 days before the opening of bids is not effective, unless the Administrator finds that there is reasonable time to notify bidders. A modification may not continue in effect beyond the effective period of the wage determination to which it relates. The Administrator sends any modification to the sponsor as soon as possible. If the modification is effective, it must be incorporated in the invitation for bids, by issuing an addendum to the specifications or otherwise.

13. *Awarding contracts.* (a) A sponsor may not award a construction contract without the written concurrence of the Administrator (through the appropriate FAA office) that the contract prices are reasonable. A sponsor that awards contracts on the basis of public advertising and open competitive bidding, shall, after the bids are opened, send a tabulation of the bids and its recommendations for award to the appropriate FAA office. The sponsor may not accept a bid by a contractor whose name appears on the current list of ineligible contractors published by the Comptroller General of the United States under § 5.6(b) of the regulations of the Secretary of Labor (29 CFR Part 5), or a bid by any firm, corporation, partnership, or association in which an ineligible contractor has a substantial interest.

(b) A sponsor's proposed contract must have pre-award review and approval by the FAA in any of the following circumstances:

(1) The sponsor's procurement system is not in compliance with one or more significant aspects of Attachment O of OMB Circular A-102 or with the standards of this appendix.

(2) The procurement is expected to exceed $10,000 and is to be awarded without competition or only one bid or offer is received in response to solicitation.

(3) The procurement is expected to exceed $10,000 and specifies a "brand name" product.

(c) The FAA may require pre-award review and approval of a sponsor's proposed contract under any of the following circumstances:

(1) The sponsor's procurement system has not yet been reviewed by the FAA for compliance with OMB Circular A-102 and this appendix.

(2) The sponsor has requested pre-award assistance.

(3) The proposal is for automatic data processing in accordance with paragraph C1 of Attachment B to Federal Management Circular 74-4 (39 FR 27133; 43 FR 50977).

(4) The proposal is one of a series with the same firm.

(5) The proposal is to be performed outside the recipient's established procurement system or office.

(6) The proposal is for construction and is to be awarded through the negotiation procurement method or without competition.

14. *Force account work.* Before undertaking any force account construction work, the sponsor (or any public agency acting as agent for the sponsor) must obtain the written consent of the Administrator through the appropriate FAA office. In requesting that consent, the sponsor must submit—

(a) Adequate plans and specifications showing the nature and extent of the construction work to be performed under that force account;

(b) A schedule of the proposed construction and of the construction equipment that will be available for the project;

(c) Assurance that adequate labor, material, equipment, engineering personnel, as well as supervisory and inspection personnel as required by this appendix, will be provided; and

(d) A detailed estimate of the cost of the work, broken down for each class of costs involved, such as labor, materials, rental of equipment, and other pertinent items of cost.

15. *Each sponsor shall*—

(a) Include the equal opportunity clause required by 41 CFR 60-1.4(b) in each nonexempt construction contract and subcontract;

(b) Prior to the award of each nonexempt contract, require each prime contractor and subcontractor to submit the certification required by 41 CFR 60-1.8(b);

(c) Include the Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246) required by 41 CFR 60-4.2 in all solicitations for offers and bids on each nonexempt construction contract and subcontract;

(d) Include the Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246) required by 41 CFR 60-4.3(a) in each nonexempt construction contract and subcontract.

16. *Exceptions.* (a) Paragraphs 1 through 5 and paragraphs 9 through 13 of this section do not apply to contracts with the owners of airport hazards, buildings, pipelines, powerlines, or other structures or facilities, for installing, extending, changing, removing, or relocating any of those structures or facilities. However, the sponsor must obtain the approval of the appropriate FAA office before entering into such a contract.

(b) Any oral or written agreement or understanding between a sponsor and another public agency that is not a sponsor of the project, under which that public agency undertakes construction work for or as agent of the sponsor, is not considered to be a construction contract for the purposes of this appendix.

[Doc. No. 19430, 45 FR 34796, May 22, 1980]

APPENDIX D—ASSURANCES

There is set forth below the assurances that the sponsor or planning agency must submit with its application in accordance with §§ 152.111 or 152.113, as applicable.

I. General Assurance

Each applicant for an airport development grant or an airport planning grant shall submit the following assurance:

The applicant hereby assures and certifies that it will comply with the regulations, policies, guidelines, and requirements, including Office of Management and Budget Circulars No. A-95 (41 FR 2052), A-102 (42 FR 45828), and FMC 74-4 (39 FR 27133; as amended by 43 FR 50977), as they relate to the application, acceptance, and use of Federal funds for this federally-assisted project.

II. Airport Development

A. *Assurances.* Each applicant for an airport development grant shall submit the following assurances:

1. *Authority of applicant.* It possesses legal authority to apply for the grant, and to finance and construct the proposed facilities; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body, authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.

2. *E.O. 11296 and E.O. 11288.* It will comply with the provisions of: Executive Order 11296, relating to evaluation of flood hazards, and Executive Order 11288, relating to the prevention, control, and abatement of water pollution.

3. *Sufficiency of funds.* It will have sufficient funds available to meet the non-Federal share of the cost for construction projects. Sufficient funds will be available when construction is completed to assure effective operation and maintenance of the facility for the purposes constructed.

4. *Construction.* It will obtain approval by the appropriate Federal agency of the final working drawings and specifications before the project is advertised or placed on the market for bidding; that it will construct the project, or cause it to be constructed, to final completion in accordance with the application and approved plans and specification; that it will submit to the appropriate Federal agency for prior approval changes that alter the costs of the project, use of space, or functional layout; that it will not enter into a construction contract(s) for the project or undertake other activities until the conditions of the construction grant program(s) have been met.

5. *Supervision, inspection, and reporting.* It will provide and maintain competent and adequate architectural engineering supervision and inspection at the construction site to insure that the completed work conforms with the approved plans and specifications; that it will furnish progress reports and such other information as the Federal grantor agency may require.

6. *Operation of facility.* It will operate and maintain the facility in accordance with the minimum standards as may be required or prescribed by the applicable Federal, State and local agencies for the maintenance and operation of such facilities.

7. *Access to records.* It will give the grantor agency and the Comptroller General through any authorized representative access to and the right to examine all records, books, papers, or documents related to the grant.

8. *Access for handicapped.* It will require the facility to be designed to comply with Part 27, Nondiscrimination on the Basis of Handicap in Federallly Assisted Programs and Activities Receiving or Benefiting from Federal Financial Assistance, of the Regulations of the Office of the Secretary of Transportation (49 CFR Part 27). The applicant will be responsible for conducting inspections to insure compliance with these specifications by the contractor.

9. *Commencement and completion.* It will cause work on the project to be commenced within a reasonable time after receipt of notification from the approving Federal agency that funds have been approved and that the project will be prosecuted to completion with reasonable diligence.

10. *Disposition of interest.* It will not dispose of or encumber its title or other interests in the site and facilities during the period of Federal interest or while the Government holds bonds, whichever is the longer.

11. *Civil Rights.* It will comply with Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352) and in accordance with Title VI of that Act, no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the applicant receives Federal financial assistance and will immediately take any measures necessary to effectuate this agreement. If any real property or structure thereon is provided or improved with the aid of Federal financial assistance extended to the Applicant, this assurance shall obligate the Applicant, or in the case of any transfer of such property, any transferee, for the period during which the real property or structure is used for a purpose for which the Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits.

12. *Private gain.* It will establish safeguards to prohibit employees from using their positions for a purpose that is or gives

the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business, or other ties.

13. *Relocation assistance.* It will comply with the requirements of Title II and Title III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Pub. L. 91-646) which provides for fair and equitable treatment of persons displaced as a result of Federal and federally assisted programs.

14. *OMB Circular A-102.* It will comply with all requirements imposed by the Federal grantor agency concerning special requirements of law, program requirements, and other administrative requirements approved in accordance with Office of Management and Budget Circular No. A-102.

15. *Hatch Act.* It will comply with the provisions of the Hatch Act which limit the political activity of employees.

16. *Federal Fair Labor Standards Act.* It will comply with the minimum wage and maximum hours provisions of the Federal Fair Labor Standards Act, as they apply to hospital and eduational institution employees of State and local governments.

17. *Effective date and duration.* These covenants shall become effective upon acceptance by the sponsor of an offer of Federal aid for the Project or any portion thereof, made by the FAA and shall constitute a part of the Grant Agreement thus formed. These covenants shall remain in full force and effect throughout the useful life of the facilities developed under this Project, but in any event not to exceed twenty (20) years from the date of said acceptance of an offer of Federal aid for the Project. However, these limitations on the duration of the covenants do not apply to the covenant against exclusive rights and real property acquired with Federal funds. Any breach of these covenants on the part of the sponsor may result in the suspension or termination of, or refusal to grant Federal assistance under, FAA administered programs, or such other action which may be necessary to enforce the rights of the United States under this agreement.

18. *Conditions and limitations on airport use.* The Sponsor will operate the Airport as such for the use and benefit of the public. In furtherance of this covenant (but without limiting its general applicability and effect), the Sponsor specifically agrees that it will keep the Airport open to all types, kinds, and classes of aeronautical use on fair and reasonable terms without discrimination between such types, kinds, and classes. *Provided,* that the sponsor may establish such fair, equal, and not unjustly discriminatory conditions to be met by all users of the airport as may be necessary for the safe and efficient operation of the Airport; and *Provided further,* That the Sponsor may prohibit or limit any given type, kind, or class of aeronautical use of the Airport if such action is necessary for the safe operation of the Airport or necessary to serve the civil aviation needs of the public.

19. *Exclusive right.* The Sponsor—

a. Will not grant or permit any exclusive right forbidden by Section 308(a) of the Federal Aviation Act of 1958 (49 U.S.C. 1349(a)) at the Airport, or at any other airport now owned or controlled by it;

b. Agrees that, in furtherance of the policy of the FAA under this covenant, unless authorized by the Administrator, it will not, either directly or indirectly, grant or permit any person, firm or corporation the exclusive right at the Airport, or at any other airport now owned or controlled by it, to conduct any aeronautical activities, including, but not limited to charter flights, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, air carrier operations, aircraft sales and services, sale of aviation petroleum products whether or not conducted in conjunction with other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity.

c. Agrees that it will terminate any existing exclusive right to engage in the sale of gasoline or oil, or both, granted before July 17, 1962, at such an airport, at the earliest renewal, cancellation, or expiration date applicable to the agreement that established the exclusive right; and

d. Agrees that it will terminate any other exclusive right to conduct an aeronautical activity now existing at such an airport before the grant of any assistance under the Airport and Airway Development Act.

20. *Public use and benefit.* The Sponsor agrees that it will operate the Airport for the use and benefit of the public, on fair and reasonable terms, and without unjust discrimination. In furtherance of the covenant (but without limiting its general applicability and effect), the Sponsor specifically covenants and agrees:

a. That in its operation and the operation of all facilities on the Airport, neither it nor any person or organization occupying space or facilities thereon will discriminate against any person or class of persons by reason of race, color, creed, or national origin in the use of any of the facilities provided for the public on the Airport.

b. That in any agreement, contract, lease or other arrangement under which a right or privilege at the Airport is granted to any person, firm, or corporation to conduct or engage in any aeronautical activity for furnishing services to the public at the Airport, the Sponsor will insert and enforce provisions requiring the contractor—

(1) to furnish said service on a fair, equal, and not unjustly discriminatory basis to all users thereof, and

(2) to charge fair, reasonable, and not unjustly discriminatory prices for each unit or service; Provided, That the contractor may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.

c. That it will not exercise or grant any right or privilege which would operate to prevent any person, firm or corporation operating aircraft on the Airport from performing any services on its own aircraft with its own employees (including, but not limited to maintenance and repair) that it may choose to perform.

d. In the event the Sponsor itself exercises any of the rights and privileges referred to in subsection b, the services involved will be provided on the same conditions as would apply to the furnishing of such services by contractors or concessionaires of the Sponsor under the provisions of such subsection b.

21. *Nonaviation activities.* Nothing contained herein shall be construed to prohibit the granting or exercise of an exclusive right for the furnishing of nonaviation products and supplies or any service of a nonaeronautical nature or to obligate the Sponsor to furnish any particular nonaeronautical service at the Airport.

22. *Operation and maintenance of the airport.* The Sponsor will operate and maintain in a safe and serviceable condition the Airport and all facilities thereon and connected therewith which are necessary to serve the aeronautical users of the Airport other than facilities owned or controlled by the United States, and will not permit any activity thereon which would interfere with its use for airport purposes; *Provided*, That nothing contained herein shall be construed to require that the Airport be operated for aeronautical uses during temporary periods when snow, flood, or other climatic conditions interfere with such operation and maintenance; and *Provided further*, That nothing herein shall be construed as requiring the maintenance, repair, restoration or replacement of any structure or facility which is substantially damaged or destroyed due to an act of God or other condition or circumstance beyond the control of the Sponsor. In furtherance of this covenant the sponsor will have in effect at all times arrangements for—

a. Operating the airport's aeronautical facilities whenever required;

b. Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and

c. Promptly notifying airmen of any condition affecting aeronautical use of the Airport.

23. *Airport Hazards.* Insofar as it is within its power and reasonable, the Sponsor will, either by the acquisition and retention of easements or other interests in or rights for the use of land or airspace or by the adoption and enforcement of zoning regulations, prevent the construction, erection, alteration, or growth of any structure, tree, or other object in the approach areas of the runways of the Airport, which would constitute an airport hazard.

In addition, the Sponsor will not erect or permit the erection of any permanent structure or facility which would interfere materially with the use, operation, or future development of the Airport, in any portion of a runway approach area in which the Sponsor has acquired, or hereafter acquires, property interests permitting it to so control the use made of the surface of the land.

24. *Use of adjacent land.* Insofar as it is within its power and reasonable, the Sponsor will, either by the acquisition and retention of easements or other interests in or rights for the use of land or airspace or by the adoption and enforcement of zoning regulations, take action to restrict the use of land adjacent to or in the immediate vicinity of the Airport to activities and purposes compatible with normal airport operations including landing and takeoff of aircraft.

25. *Airport layout plan.* The Sponsor will keep up to date at all times an airport layout plan of the Airport showing (1) boundaries of the Airport and all proposed additions thereto, together with the boundaries of all offsite areas owned or controlled by the Sponsor for airport purposes, and proposed additions thereto; (2) the location and nature of all existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars and roads), including all proposed extensions and reductions of existing airport facilities; and (3) the location of all existing and proposed nonaviation areas and of all existing improvements thereon. Such airport layout plan and each amendment, revision, or modification thereof, shall be subject to the approval of the FAA, which approval shall be evidenced by the signature of a duly authorized representative of the FAA on the face of the airport layout plan. The Sponsor will not make or permit any changes or alterations in the airport or in any of its facilities other than in conformity with the airport layout plan as so approved by the FAA, if such changes or alterations might adversely affect the safety, utility, or efficiency of the Airport.

26. *Federal use of facilities.* All facilities of the Airport developed with Federal aid and

all those usable for the landing and taking off of aircraft, will be available to the United States at all times, without charge, for use by government aircraft in common with other aircraft, except that if the use by government aircraft is substantial, a reasonable share, proportional to such use, of the cost of operating and maintaining facilities so used, may be charged. Unless otherwise determined by the FAA, or otherwise agreed to by the Sponsor and the using agency, substantial use of an airport by government aircraft will be considered to exist when operations of such aircraft are in excess of those which, in the opinion of the FAA, would unduly interfere with use of the landing area by other authorized aircraft, or during any calendar month that—

a. Five (5) or more government aircraft are regularly based at the airport or on land adjacent thereto; or

b. The total number of movements (counting each landing as a movement and each takeoff as a movement) of government aircraft is 300 or more, or the gross accumulative weight of government aircraft using the Airport (the total movements of government aircraft multiplied by gross certified weights of such aircraft) is in excess of five million pounds.

27. *Areas for FAA Use.* Whenever so requested by the FAA, the Sponsor will furnish without cost to the Federal Government, for construction, operation, and maintenance of facilities for air traffic control activities, or weather reporting activities and communication activities related to air traffic control, such areas of land or water, or estate therein, or rights in buildings of the Sponsor as the FAA may consider necessary or desirable for construction at Federal expense of space or facilities for such purposes. The approximate amounts of areas and the nature of the property interests and/or rights so required will be set forth in the Grant Agreement relating to the project. Such areas or any portion thereof will be made available as provided herein within 4 months after receipt of written requests from the FAA.

28. *Fee and rental structure.* The airport operator or owner will maintain a fee and rental structure for the facilities and services being provided the airport users which will make the Airport as self-sustaining as possible under the circumstances existing at the Airport, taking into account such factors as the volume of traffic and economy of collection.

29. *Reports to FAA.* The Sponsor will furnish the FAA with such annual or special airport financial and operational reports as may be reasonably requested. Such reports may be submitted on forms furnished by the FAA, or may be submitted in such manner as the Sponsor elects so long as the essential data are furnished. The Airport and all airport records and documents affecting the Airport, including deeds, leases, operation and use agreements, regulations, and other instruments, will be made available of inspection and audit by the Secretary and the Comptroller General of the United States, or their duly authorized representatives, upon reasonable request. The Sponsor will furnish to the FAA or to the General Accounting Office, upon request, a true copy of any such document.

30. *System of accounting.* All project accounts and records will be kept in accordance with a standard system of accounting if so prescribed by the Secretary.

31. *Interfering right.* If at any time it is determined by the FAA that there is any outstanding right or claim of right in or to the Airport property, other than those set forth in Part II of the Application for Federal Assistance, the existence of which creates an undue risk of interference with the operation of the Airport or the performance of the covenants of this Part, the sponsor will acquire, extinguish, or modify such right or claim of right in a manner acceptable to the FAA.

32. *Performance obligation.* The Sponsor will not enter into any transaction which would operate to deprive it of any of the rights and powers necessary to perform any or all of the covenants made herein, unless by such transaction the obligation to perform all such covenants is assumed by another public agency found by the FAA to be eligible under the Act and Regulations to assume such obligations and having the power, authority, and financial resources to carry out all such obligations. If an arrangement is made for management or operation of the Airport by any agency or person other than the Sponsor or an employee of the Sponsor, the Sponsor will reserve sufficient rights and authority to insure that the Airport will be operated and maintained in accordance with the Act, the Regulations, and these covenants.

33. *Meaning of terms.* Unless the context otherwise requires, all terms used in these covenants which are defined in the Act and the Regulations shall have the meanings assigned to them therein.

B. *Airport Layout Plan Approval.* A sponsor seeking FAA approval of a new or revised airport layout plan shall submit with the plan an environmental assessment prepared in conformance with Appendix 6 of FAA Order 1050.1C, "Policies and Procedures for Considering Environmental Impacts" (45 FR 2244; January 10, 1980) and FAA Order 5050.4 "Airport Environmental Handbook" (45 FR 56622; August 25, 1980), if an assessment is required by Order 5050.4.

III. Airport Planning

Each applicant for an airport planning grant shall submit the assurances numbered 1 (except for the phrase "and to finance and construct the proposed facilities"), 7, 9, 11 (except for the last sentence), and 12, 14, 15, 30, and 33 of Part II of this appendix.

(Airport and Airway Development Act of 1970, as amended (49 U.S.C. 1701 *et seq.*); sec. 1.47(f)(1) Regulations of the Office of the Secretary of Transportation (49 CFR 1.47(f)(1)))

[Doc. No. 19430, 45 FR 34797, May 22, 1980, as amended by Amdt. 152-11, 45 FR 56622, Aug. 25, 1980]

PART 153—ACQUISITION OF U.S. LAND FOR PUBLIC AIRPORTS

Sec.
153.1 Applicability and purpose.
153.3 Public agencies eligible for conveyances.
153.5 Requests for conveyances.
153.7 Form and content of requests for conveyances.
153.9 Determinations by the Administrator.
153.11 Determinations and conveyances by head of controlling department or agency.
153.13 Covenants in conveyances.
153.15 Reverter clause in conveyances.

AUTHORITY: 60 Stat. 170; sec. 10, 62 Stat. 453; secs. 313(a), 314, 601, 607, 72 Stat. 752; secs. 3, 4, 63 Stat. 700; 49 U.S.C. 1101-1119, 1159, 1354(a), 1355, 1421, 1427; 50 U.S.C. App. 1622b, 1622c, unless otherwise noted.

§ 153.1 Applicability and purpose.

(a) *General.* This part applies to the acquiring by public agencies, under section 16 of the Federal Airport Act (49 U.S.C. 1115), of property interests in land owned or controlled by the United States, the use of which is necessary to carry out a project under the Federal-aid Airport Program or to operate a public airport. If the Administrator determines that such a property interest is reasonably necessary to carry out such a project or to operate a public airport, he is authorized by section 16 of the Act to request the head of the department, board, bureau, commission, or other agency in the executive branch of the Federal Government, or corporation wholly owned by the United States (in this part called the "department or agency,") that owns or controls that property interest to convey so much of it as the Administrator considers necessary, to the public agency sponsoring the project concerned or owning or controlling the airport concerned, as the case may be. The head of that department or agency is then required to determine whether the conveyance is inconsistent with the needs of that department or agency. If he determines that it is not inconsistent with those needs, he shall make the conveyance as provided in § 153.11.

(b) *Definition of "airport purposes".* For the purposes of this part, "airport purposes" means uses of property interests in land that are directly related to the actual operation or the foreseeable aeronautical development of a public airport. It includes—

(1) *Operational use.* Use of property interests for aerial approaches, navaids, runways, taxiways, aprons, or other aircraft movement areas;

(2) *Future developmental use.* Reservation of property interests for foreseeable aeronautical development (for example, a planned runway extension or a planned terminal building development);

(3) *Essential support services use.* Use of property interests for activities directly supporting flight operations (for example, aircraft maintenance, fueling, and servicing; mail, passenger, and cargo processing facilities; communications, and air traffic control; crash rescue, fire fighting, and airport maintenance); and

(4) *Complementary activities use.* Use of property interests for facilities or services that enhance the utility or convenience of the aeronautical services (for example, facilities to provide food, shelter, surface transportation, or vehicular parking).

(49 U.S.C. 1120)

[Doc. No. 1329, 27 FR 12360, Dec. 13, 1962, as amended by Amdt. 153-3, 33 FR 14108, Sept. 18, 1968]

§ 153.3 Public agencies eligible for conveyances.

A State, Puerto Rico, the Virgin Islands, Guam, or the District of Columbia, any agency of any of them, a municipality or other political subdivision, or a tax-supported organization, may request a conveyance of a property interest under this part if—

(a) It plans to use that property interest for or in connection with—

(1) Developing a public airport as a project under the Federal-aid Airport Program;

(2) Improving, developing, or protecting an existing public airport, whether or not in connection with a project under that Program; or

(3) Establishing or constructing a new public airport, whether or not in connection with a project under that Program;

(b) It has legal authority to accept the conveyance; to engage in the kind of airport development described in § 151.35 of this chapter, improvement, or construction necessary to benefit fully from the conveyance; to establish, operate, and maintain the proposed or existing airport; and to raise funds necessary for the proposed development, improvement, or construction and for financing the operation and maintenance of the Airport;

(c) It has enough funds, or will be able to get them, to pay for any development, improvement, or construction that is necessary to benefit reasonably from the conveyance, and to operate and maintain the airport; and

(d) It is not in default on any obligation to the United States in connection with developing, operating, or maintaining an airport.

(49 U.S.C. 1120)

[Doc. No. 1329, 27 FR 12360, Dec. 13, 1962, as amended by Amdt. 153-3, 33 FR 14108, Sept. 18, 1968]

§ 153.5 Requests for conveyances.

A public agency that is eligible under § 153.3 may request a conveyance of a property interest under this part by filing a request for it in quadruplicate with the Area Manager for the area in which the property interest is located.

(49 U.S.C. 1120)

[Doc. No. 1329, 27 FR 12360, Dec. 13, 1962, as amended by Amdt. 153-3, 33 FR 14108, Sept. 18, 1968]

§ 153.7 Form and content of requests for conveyances.

(a) A request for a conveyance of a property interest under this part need not be in any special form. However, the public agency applying must provide enough information to enable the Administrator to determine—

(1) That it is eligible to request the conveyance;

(2) That it will accept the conveyance subject to the conditions and covenants in the deed of conveyance;

(3) That the property interest requested is reasonably necessary to carry out a project under the Federal-aid Airport Program or to operate a public airport; and

(4) The extent of the property interest that is necessary to accomplish the purpose.

(b) Each public agency requesting a conveyance must send with its request, or as soon thereafter as possible, the following information, if applicable and available, together with any other information requested by the Administrator:

(1) Its name and address.

(2) The name, location, and ownership of the airport concerned, or if the airport is not in existence, the proposed name, the approved location, and the prospective owner.

(3) If the airport is being operated under a lease or agreement from the public agency, a copy of the lease or agreement.

(4) A statement of its legal authority and financial ability to develop, improve, construct, operate, and maintain the airport.

(5) The name of the department or agency of the United States that owns or controls the property interest.

(6) A legal description of the land requested, and the amount of acreage, if applicable.

(7) A list of all improvements on the land and the use or disposition to be made thereof.

(8) A statement of the specific property interest, such as fee title, leasehold, easement, permit, license, or other interest, that it needs.

(9) A complete justification of its need for the property interest, supported by any maps, charts, photo-

graphs, or other documents that may be necessary to show the need for that property interest, and if use of other land might fill the need, a statement of the particular advantage of the United States land over the other suitable land.

(10) A statement of the plans and commitments for the financing of or accomplishing any development, improvement, or construction requiring the use of the property interest.

(11) An estimated date on which the property interest will be needed.

(12) The status of any project for developing the airport concerned under the Federal-aid Airport Program.

(13) A statement that it has the legal authority to accept a conveyance subject to the covenants and reverter clause described in §§ 153.13, and 153.15.

(c) Each request for a conveyance under this part must be signed by an officer of the public agency concerned who has been authorized by it to file the request. The request must be accompanied by a certified copy of a resolution or ordinance authorizing him to file the request and indicating that the public agency is willing to accept the conveyance subject to the covenants and reverter clause described in §§ 153.13 and 153.15. In addition, the resolution or ordinance should indicate that the public agency is willing to accept the property subject to other terms that may be imposed by the United States, and subject to any changes in the boundaries or acreage that might be acceptable to the Administrator so far as they concern the development or use of the property for public airport purposes, to avoid having to pass another resolution or ordinance if terms and conditions in addition to those required by §§ 153.13 and 153.15 are placed in the deed of conveyance or a change in the boundaries or acreage becomes necessary.

(49 U.S.C. 1120)

[Doc. No. 1329, 27 FR 12360, Dec. 13, 1962, as amended by Amdt. 153-3, 33 FR 14108, Sept. 18, 1968]

§ 153.9 Determinations by the Administrator.

The Administrator reviews each request for a conveyance under this part and determines whether the public agency requesting the conveyance is eligible and a conveyance is proper, under section 16 of the Federal Airport Act and this part. If he decides that the public agency is eligible and the conveyance is proper, he requests the head of the department or agency owning or controlling the property interest to convey to the public agency as much of an interest as the Administrator considers to be necessary, without consideration, other than the benefits to accrue to the public and the United States from the use of the land for airport purposes.

[Docket No. 1329, 27 FR 12360, Dec. 13, 1962]

§ 153.11 Determinations and conveyances by head of controlling department or agency.

(a) Upon receiving a request for a conveyance under this part from the Administrator, the head of the department or agency owning or controlling the property interest requested is required, by section 16(b) of the Federal Airport Act, to determine whether the conveyance is inconsistent with the needs of his department or agency, and to notify the Administrator of his determination within four months after receiving the Administrator's request.

(b) Section 16(b) of the Act provides that, if the head of the department or agency concerned determines that the requested conveyance is not inconsistent with those needs, he shall, upon the approval of the Attorney General and the President, perform any acts and execute any instruments necessary to make the conveyance, without expense to the United States.

[Docket No. 1329, 27 FR 12360, Dec. 13, 1962]

§ 153.13 Covenants in conveyances.

Whenever the Administrator requests a department or agency to make a conveyance under this part, he also requests that the instrument of conveyance contain, as a covenant binding on the grantee, its successors and assigns, a provision—

(a) That the grantee will use the property interest for airport purposes, and will develop that interest for airport purposes within one year after the date of this conveyance;

(b) That the airport, and its appurtenant areas and its buildings and facilities, whether or not on the land conveyed, will be operated as a public airport on fair and reasonable terms, without discrimination on the basis of race, color, creed, or national origin, as to airport employment practices, and as to accommodations, services, facilities and other public uses of the airport;

(c) That the grantee will not grant or permit any exclusive right forbidden by section 308(a) of the Federal Aviation Act of 1958 (49 U.S.C. 1349(a)) at the airport, or at any other airport now or hereafter owned or controlled by it;

(d) That in furtherance of the policy of the FAA under this covenant the grantee—

(1) Agrees that, unless authorized by the Administrator, it will not, either directly or indirectly, grant or permit any person, firm, or corporation the exclusive right at the airport, or at any other airport now or hereafter owned or controlled by it, to conduct any aeronautical activities, including, but not limited to, charter flights, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, air carrier operations, aircraft sales and services, sale of aviation petroleum products whether or not conducted in conjunction with other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity;

(2) Agrees that it will terminate any existing exclusive right to engage in the sale of gasoline or oil, or both, granted before July 17, 1962, at such an airport, at the earliest renewal, cancellation, or expiration date applicable to the agreement that established the exclusive right; and

(3) Agrees that it will terminate forthwith any other exclusive right to conduct any aeronautical activity now or hereafter existing at such an airport;

(e) That any later transfer of the property interest conveyed will be subject to the covenants and conditions in the instrument of conveyance;

(f) That, if the covenant to develop the property interest for airport purposes within 1 year after the date of this conveyance is breached, the Federal Aviation Administrator may give notice to the grantee requiring him to take specified action towards development within a fixed period. These notices may be issued repeatedly, and outstanding notices may be amended or supplemented. Upon expiration of a period so fixed without completion by the grantee of the required action, the Federal Aviation Administrator may, on behalf of the United States, enter, and take title to, the property interest conveyed or, in his discretion, that part of that interest to which the breach relates;

(g) That, if any covenant or condition in the instrument of conveyance, other than the foregoing covenant, is breached, the Federal Aviation Administrator may, on behalf of the United States, immediately enter, and take title to, the property interest conveyed or, in his discretion, that part of that interest to which the breach relates; and

(h) That a determination by the Federal Aviation Administrator that one of the foregoing covenants has been breached is conclusive of the facts; and that, if the right of entry and possession of title stipulated in the foregoing covenants is exercised, the grantee will, upon demand of the Federal Aviation Administrator, take any action (including prosecution of suit or executing of instruments) that may be necessary to evidence transfer to the United States of title to the property interest conveyed, or, in the Administrator's discretion, to that part of that interest to which the breach relates.

[Amdt. 153-3, 33 FR 14108, Sept. 18, 1968, as amended by Amdt. 153-4, 34 FR 3656, Mar. 1, 1969; Amdt. 153-5, 34 FR 9617, June 19, 1969]

§ 153.15 Reverter clause in conveyances.

Whenever the Administrator requests a department or agency to make a conveyance under this part, he also requests that the granting clause of the instrument of conveyance contain a reverter clause, reading as follows:

> Any part of the property interest hereby conveyed that has not been developed for airport purposes within 5 years after the date of conveyance, or that ceases to be used for airport purposes for a period of 6 months, shall automatically revert to the United States, the grantee agreeing by the acceptance of this conveyance or the rights granted herein that a determination by the Federal Aviation Administrator that all or a part of the property interest has not been so developed, or has ceased to be so used, is conclusive of the facts.

(49 U.S.C. 1120)

[Amdt. 153-3, 33 FR 14109, Sept. 18, 1968]

PART 154—ACQUISITION OF U.S. LAND FOR PUBLIC AIRPORTS UNDER THE AIRPORT AND AIRWAY DEVELOPMENT ACT OF 1970

Sec.

154.1 Applicability and purpose.
154.3 Public agencies eligible for conveyances.
154.5 Application for conveyance.
154.7 Form and content of application for conveyance.
154.9 Determinations by the Administrator.
154.11 Determination and conveyance by head of controlling agency.
154.13 Covenants in conveyances.

AUTHORITY: Secs. 11-27, 84 Stat. 220-233; sec. 1.47(g) of the regulations of the Office of the Secretary of Transportation, 49 CFR 1, unless otherwise noted.

SOURCE: Doc. No. 10858, 38 FR 12204, May 10, 1973, unless otherwise noted.

§ 154.1 Applicability and purpose.

(a) *General.* This part applies to the acquiring by public agencies, under section 23 of the Airport and Airway Development Act of 1970 (Pub. L. 91-258, 84 Stat. 232), of property interest in land owned or controlled by the United States, the use of which is reasonably necessary to carry out a project for airport development under part II of that act or to operate a public airport, including lands reasonably necessary to meet future development of an airport in accordance with the national airport system plan. If the Administrator determines that such a property interest is reasonably necessary to carry out such a project or to operate a public airport, he is authorized by section 23 of the act to request the head of the Department, Board, Bureau, Commission, or other agency in the executive branch of the Federal Government, or corporation wholly owned by the United States (in this part called the "controlling agency") that owns or controls that property interest to convey so much of it as the Administrator considers necessary, to the public agency sponsoring the project concerned or owning or controlling the airport concerned, as the case may be. The head of that agency is then required to determine whether the conveyance is inconsistent with the needs of that agency. If he determines that it is not inconsistent with those needs, he shall make the conveyance as provided in § 154.11 of this part.

(b) *Property interests to which this part applies.* This part applies with respect to fee title or any other interest in land that is reasonably necessary to carry out a project under the airport development aid program or to operate a public airport or in lands reasonably necessary to meet future development of an airport, in accordance with the national airport system plan, including leaseholds, permits, licenses, and easements, over lands adjacent to the airport that will assure freedom from interference with the intended purpose. The property interest must be in land for an airport that is included in, or currently meets the entrance criteria for, the current national airport system plan.

(c) *Property interests to which this part does not apply.* This part does not apply with respect to—

(1) Property interests in lands owned or controlled by the United States within—

(i) Any national park, national monument, national recreation area, or similar area under the administration of the National Park Service;

(ii) Any unit of the National Wildlife Refuge System or similar area under the jurisdiction of the Bureau of Sport Fisheries and Wildlife; or

(iii) Any national forest or Indian reservation; or

(2) Any entire, existing Federal airport.

(d) *Definition of "airport purposes."* For the purposes of this part, "airport purposes" means uses of property interests in land that are directly related to the actual operation of the foreseeable aeronautical development of the public airport. It includes—

(1) *Operational use.* Use of property interest for clear zones, navigation aids, runways, taxiways, aprons and other aircraft movement areas, and land necessary to preserve the operational integrity of the airport.

(2) *Future developmental use.* Reservation of property interests for foreseeable aeronautical development (for example, a planned runway extension or a planned terminal building development);

(3) *Essential support services use.* Use of property interests for activities directly supporting flight operations (for example, aircraft maintenance, fueling, and servicing; mail, passenger, and cargo processing facilities; communications and air traffic control; airport firefighting and rescue equipment and service, and airport maintenance); and

(4) *Complementary activities use.* Use of property interests for facilities or services that enhance the utility or convenience of the aeronautical services (for example, facilities to provide food, shelter, surface transportation, or vehicular parking).

§ 154.3 Public agencies eligible for conveyances.

A State, Puerto Rico, the Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands, Guam, any agency of any of them, a municipality or other political subdivision, a tax-supported organization, or an Indian tribe or pueblo may apply for a conveyance of a property interest under this part if—

(a) It plans to use that property interest for or in connection with—

(1) Developing a public airport as a project under the airport development aid program;

(2) Improving, developing, or protecting an existing public airport, whether or not in connection with a project under the program; or

(3) Establishing or constructing a new public airport, whether or not in connection with a project under that program;

(b) It has legal authority to accept the conveyance, to engage in the kind of airport development described in § 152.41 of this chapter, improvement, or construction necessary to benefit fully from the conveyance; to establish, operate, and maintain the proposed or existing airport; and to raise funds necessary for the proposed development, improvement, or construction and for financing the operation and maintenance of the airport;

(c) It has enough funds, or will be able to get them, to pay for any development, improvement, or construction that is necessary to benefit reasonably from the conveyance, and to operate and maintain the airport; and

(d) It is not in default on any obligation to the United States in connection with developing, operating, or maintaining an airport.

§ 154.5 Application for conveyance.

A public agency that is eligible under § 154.3 may apply for a conveyance of a property interest under this part by filing an application for it in quadruplicate with the FAA office serving the area in which the property interest is located.

§ 154.7 Form and content of application for conveyance.

(a) An application for a conveyance of a property interest under this part need not be in any special form. However, the public agency applying must provide enough information to enable the Administrator to determine—

(1) That it is eligible to apply for the conveyance;

(2) That is will accept the conveyance subject to the conditions and covenants in the deed of conveyance;

(3) That the property interest applied for is reasonably necessary to carry out a project under the airport development aid program or to operate a public airport; and

(4) The extent of the property interest that is necessary to accomplish the purpose.

(b) Each public agency applying for a conveyance must send with its request, or as soon thereafter as possible, the following information, if applicable and available, together with any other information requested by the Administrator:

(1) Its name and address.

(2) The name, location, and ownership of the airport concerned, or if the airport is not in existence, the proposed name, the approved location, and the prospective owner.

(3) If the airport is being operated under a lease or agreement from the public agency, a copy of the lease or agreement.

(4) A statement of its legal authority and financial ability to develop, improve, construct, operate, and maintain the airport.

(5) The name of the department or agency of the United States that owns or controls the property interest.

(6) A legal description of the land requested, and the amount of acreage, if applicable.

(7) A list of all improvements on the land and the use or disposition to be made thereof.

(8) A statement of the specific property interest, such as fee title, leasehold, easement, permit, license, or other interest, that it needs.

(9) A complete justification of its need for the property interest, supported by any maps, charts, photographs, or other documents that may be necessary to show the need for that property interest, and if use of other land might fill the need, a statement of the particular advantage of the U.S. land over the other suitable land.

(10) A statement of the plans and commitments for the financing of or accomplishing any development, improvement, or construction requiring the use of the property interest.

(11) An estimated date on which the property interest will be needed.

(12) The status of any project for developing the airport under the airport development aid program.

(13) A statement that it has the legal authority to accept a conveyance subject to the covenants and reverter clause described in § 154.13.

(14) The sponsor's environmental assessment prepared in conformance with Appendix 6 of FAA Order 1050.1C, "Policies and Procedures for Considering Environmental Impacts" (45 FR 2244; January 10, 1980), FAA Order 5050.4, "Airport Environmental Handbook" (45 FR 56622; August 25, 1980), if an assessment is required by Order 5050.4. Copies of these orders may be examined in the Rules Docket, Office of the Chief Counsel, FAA, Washington, D.C., and may be obtained on request at any FAA regional office headquarters or any airports district office.

(15) A statement that if the conveyance involves the displacement of any person or the acquisition of an interest in real property that is within the purview of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (84 Stat. 18949), the applicant will make the assurances required by §§ 25.57(a) and 25.59(a) of the regulations of the Office of the Secretary of Transportation (49 CFR Part 25).

(c) Each application for a conveyance under this part must be signed by an officer of the public agency concerned who has been authorized by it to file the application. The application must be accompanied by a certified copy of a resolution or ordinance authorizing him to file the application and indicating that the public agency is willing to accept the conveyance subject to the covenants described in § 154.13 of this part.

(Secs. 16 and 23, Airport and Airway Development Act of 1970, as amended (49 U.S.C. 1716 and 1723); sec. 552(a), Administrative Procedure Act (5 U.S.C. 552(a)); sec. 1.47(f)(1), Regulations of the Office of the Secretary of Transportation, (49 CFR 1.47(f)(1)))

[Doc. No. 10858, 38 FR 12204, May 10 1973, as amended by Amdt. 154-1, 42 FR 32630, June 27, 1977; Amdt. 154-2, 45 FR 56622, Aug. 25, 1980]

§ 154.9 Determinations by the Administrator.

The Administrator reviews each application for a conveyance under this part and determines whether the public agency requesting the conveyance is eligible and a conveyance is proper, under section 23 of the Airport and Airway Development Act of 1970 and this part. If he decides that the public agency is eligible and the conveyance is proper, he requests the head of the controlling agency to convey to the public agency as much of an interest as the Administrator considers to be reasonably necessary, without consideration, other than the benefits to accrue to the public and the United States from the use of the land for airport purposes. The Administrator accompanies his request with a detailed statement of the items required by section 102(2)(c) of the National Environmental Policy Act of 1969 (42 U.S.C. 4321).

§ 154.11 Determination and conveyance by head of controlling agency.

(a) Upon receiving a request for a conveyance under this part from the Administrator, the head of the controlling agency is required, by section 23(b) of the Airport and Airway Development Act of 1970, to determine whether the conveyance is inconsistent with the needs of his agency, and to notify the Administrator of his determination within 4 months after receiving the Administrator's request.

(b) Section 23(b) of the act provides that, if the head of the controlling agency concerned determines that the requested conveyance is not inconsistent with those needs, he shall, upon the approval of the Attorney General and the President, perform any acts and execute any instruments necessary to make the conveyance, without expense to the United States.

§ 154.13 Covenants in conveyances.

Whenever the Administrator requests the head of a controlling agency to make a conveyance under this part, he also requests that the instrument of conveyance contain, as a covenant binding on the grantee, its successors and assigns, the following provisions:

(a) That the grantee will use the property interest for airport purposes, and will develop that interest for airport purposes within 1 year after the date of this conveyance. However, if the property interest is necessary to meet future development of an airport in accordance with the national airport system plan the grantee will develop that interest for airport purposes within a period of time satisfactory to the Administrator, and any interim use of that interest for other than airport purposes will be subject to such terms and conditions as the Administrator may prescribe.

(b) That the airport, and its appurtenant areas and its buildings and facilities, whether or not on the land conveyed, will be operated as a public airport on fair and reasonable terms, without unjust discrimination.

(c) That in the operation of the airport and its appurtenant areas whether or not on the land conveyed, the grantee—

(1) Agrees that no person shall be excluded from any participation, be denied any benefits, or be otherwise subjected to any discrimination, on the grounds of race, color, or national origin; and

(2) Agrees to comply with all requirements imposed by or pursuant to Part 21 of the regulations of the Office of the Secretary of Transportation (49 CFR Part 21)—nondiscrimination in federally assisted programs of the Department of Transportation—effectuation of title VI of the Civil Rights Act of 1964.

(d) That the grantee will not grant or permit any exclusive right forbidden by section 308(a) of the Federal Aviation Act of 1958 (49 U.S.C. 1349(a)) at the airport, or at any other airport now owned or controlled by it.

(e) That is furtherance of the policy of the FAA under this covenant the grantee—

(1) Agrees that, unless authorized by the Administrator, it will not, either directly or indirectly, grant or permit any person, firm, or corporation the exclusive right at the airport, or at any other airport now owned or controlled by it, to conduct any aeronautical activities, including, but not limited to, charter flights, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, air carrier operations, aircraft sales and services, sale of aviation petroleum products

whether or not conducted in conjunction with other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity;

(2) Agrees that it will terminate any existing exclusive right to engage in the sale of gasoline or oil, or both, granted before July 17, 1962, at such an airport, at the earliest renewal, cancellation, or expiration date applicable to the agreement that established the exclusive right; and

(3) Agrees that it will terminate forthwith any other exclusive right to conduct any aeronautical activity now existing at such an airport.

(f) That any later transfer of the property interest conveyed will be subject to the covenants and conditions in the instrument of conveyance.

(g) That, if the covenant to develop the property interest (or any part thereof) for airport purposes within the time specified in paragraph (a) of this section is breached, or if the property interest (or any part thereof) is not used in a manner consistent with paragraph (a) of this section or the terms of the conveyance, the Administrator may give notice to the grantee requiring him to take specified action, within a fixed period, towards development or use as prescribed, as the case may be. These notices may be issued repeatedly, and outstanding notices may be amended or supplemented. Upon expiration of a period so fixed without completion by the grantee of the required action, the Administrator may, on behalf of the United States, enter, and take title to, the property interest conveyed or the particular part of that interest to which the breach relates.

(h) That, if any covenant or condition in the instrument of conveyance, other than the covenant contained in paragraph (g) of this section, is breached, the Administrator may, on behalf of the United States, immediately enter, and take title to, the property interest conveyed or, in his discretion, that part of that interest to which the breach relates.

(i) That a determination by the Administrator that one of the foregoing covenants has been breached is conclusive of the facts; and that, if the right of entry and possession of title stipulated in the foregoing covenants is exercised, the grantee will, upon demand of the Administrator, take any action (including prosecution of suit or executing of instruments) that may be necessary to evidence transfer to the United States of title to the property interest conveyed, or, in the Administrator's discretion, to that part of that interest to which the breach relates.

PART 155—RELEASE OF AIRPORT PROPERTY FROM SURPLUS PROPERTY DISPOSAL RESTRICTIONS

Sec.
155.1 Applicability.
155.3 Applicable law.
155.5 Property and releases covered by this part.
155.7 General policies.
155.9 Release from war or national emergency restrictions.
155.11 Form and content of requests for release.
155.13 Determinations by FAA.

Authority: 60 Stat. 170; sec. 10, 62 Stat. 453; secs. 313(a), 314, 601, 607, 72 Stat. 752; secs. 3, 4, 63 Stat. 700; 49 U.S.C. 1101-1119, 1159, 1354(a), 1355, 1421, 1427; 50 U.S.C. App. 1622(b), 1622(c), unless otherwise noted.

Source: Docket No. 1329, 27 FR 12361, Dec. 13, 1962, unless otherwise noted.

§ 155.1 Applicability.

This part applies to releases from terms, conditions, reservations, or restrictions in any deed, surrender of leasehold, or other instrument of transfer or conveyance (in this part called "instrument of disposal") by which some right, title, or interest of the United States in real or personal property was conveyed to a non-Federal public agency under section 13 of the Surplus Property Act of 1944 (58 Stat. 765; 61 Stat. 678) to be used by that agency in developing, improving, operating, or maintaining a public airport or to provide a source of revenue from non-aviation business at a public airport.

§ 155.3 Applicable law.

(a) Section 4 of the Act of October 1, 1949 (63 Stat. 700) authorizes the Administrator to grant the releases described in § 155.1, if he determines that—

(1) The property to which the release relates no longer serves the purpose for which it was made subject to the terms, conditions, reservations, or restrictions concerned, or

(2) The release will not prevent accomplishing the purpose for which the property was made subject to the terms, conditions, reservations, or restrictions, and is necessary to protect or advance the interests of the United States in civil aviation.

In addition, section 4 of that Act authorizes the Administrator to grant the releases subject to terms and conditions that he considers necessary to protect or advance the interests of the United States in civil aviation.

(b) Section 2 of the Act of October 1, 1949 (63 Stat. 700) provides that the restrictions against using structures for industrial purposes in any instrument of disposal issued under section 13(g)(2)(A) of the Surplus Property Act of 1944, as amended (61 Stat. 678) are considered to be extinguished. In addition, section 2 authorizes the Administrator to issue any instruments of release or conveyance necessary to remove, of record, such a restriction, without monetary consideration to the United States.

(c) Section 68 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2098) releases, remises, and quitclaims, to persons entitled thereto, all reserved rights of the United States in radioactive minerals in instruments of disposal of public or acquired lands. In addition, section 3 of the Act of October 1, 1949 (50 U.S.C. App. 1622b) authorizes the Administrator to issue instruments that he considers necessary to correct any instrument of disposal by which surplus property was transferred to a non-Federal public agency for airport purposes or to conform the transfer to the requirements of applicable law. Based on the laws cited in this paragraph, the Administrator issues appropriate instruments of correction upon the written request of persons entitled to ownership, occupancy, or use of the lands concerned.

§ 155.5 Property and releases covered by this part.

This part applies to—

(a) Any real or personal property that is subject to the terms, conditions, reservations, or restrictions in an instrument of disposal described in § 155.1; and

(b) Any release from a term, condition, reservation, or restriction in such an instrument, including a release of—

(1) Personal property, equipment, or structures from any term, condition, reservation, or restriction so far as necessary to allow it to be disposed of for salvage purposes;

(2) Land, personal property, equipment or structures from any term, condition, reservation, or restriction requiring that it be used for airport purposes to allow its use, lease, or sale for nonairport use in place;

(3) Land, personal property, equipment, or structures from any term, condition, reservation, or restriction requiring its maintenance for airport use;

(4) Land, personal property, equipment, or structures from all terms, conditions, restrictions, or reservations to allow its use, lease, sale, or other disposal for nonairport purposes; and

(5) Land, personal property, equipment, or structures from the reservation of right of use by the United States in time of war or national emergency, to facilitate financing the operation and maintenance or further development of a public airport.

§ 155.7 General policies.

(a) Upon a request under § 155.11, the Administrator issues any instrument that is necessary to remove, of record, any restriction against the use of property for industrial purposes that is in an instrument of disposal covered by this part.

(b) The Administrator does not issue a release under this part if it would allow the sale of the property concerned to a third party, unless the public agency concerned has obligated itself to use the proceeds from the sale exclusively for developing, improving, operating, or maintaining a public airport.

(c) Except for a release from a restriction against using property for industrial purposes, the Administrator does not issue a release under this part unless it is justified under § 155.3(a)(1) or (2).

(d) The Administrator may issue a release from the terms, conditions, reservations, or restrictions of an instrument of disposal subject to any other terms or conditions that he considers necessary to protect or advance the interests of the United States in civil aviation. Such a term or condition, including one regarding the use of proceeds from the sale of property, is imposed as a personal covenant or obligation of the public agency concerned rather than as a term or condition to the release or as a covenant running with the land, unless the Administrator determines that the purpose of the term or condition would be better achieved as a condition or covenant running with the land.

(e) A letter or other document issued by the Administrator that merely grants consent to or approval of a lease, or to the use of the property for other than the airport use contemplated by the instrument of disposal, does not otherwise release the property from the terms, conditions, reservations, or restrictions of the instrument of disposal.

§ 155.9 Release from war or national emergency restrictions.

(a) The primary purpose of each transfer of surplus airport property under section 13 of the Surplus Property Act of 1944 was to make the property available for public or civil airport needs. However, it was also intended to ensure the availability of the property transferred, and of the entire airport, for use by the United States during a war or national emergency, if needed. As evidence of this purpose, most instruments of disposal of surplus airport property reserved or granted to the United States a right of exclusive possession and control of the airport during a war or emergency, substantially the same as one of the following:

(1) That during the existence of any emergency declared by the President or the Congress, the Government shall have the right without charge except as indicated below to the full, unrestricted possession, control, and use of the landing area, building areas, and airport facilities or any part thereof, including any additions or improvements thereto made subsequent to the declaration of the airport property as surplus: *Provided, however,* That the Government shall be responsible during the period of such use for the entire cost of maintaining all such areas, facilities, and improvements, or the portions used, and shall pay a fair rental for the use of any installations or structures which have been added thereto without Federal aid.

(2) During any national emergency declared by the President or by Congress, the United States shall have the right to make exclusive or nonexclusive use and have exclusive or nonexclusive control and possession, without charge, of the airport at which the surplus property is located or used or of such portion thereof as it may desire: *Provided, however,* That the United States shall be responsible for the entire cost of maintaining such part of the airport as it may use exclusively, or over which it may have exclusive possession and control, during the period of such use, possession, or control and shall be obligated to contribute a reasonable share, commensurate with the use made by it, of the cost of maintenance of such property as it may use nonexclusively or over which it may have nonexclusive control and possession: *Provided further,* That the United States shall pay a fair rental for its use, control, or possession, exclusively or nonexclusively, of any improvements to the airport made without United States aid.

(b) A release from the terms, conditions, reservations, or restrictions of an instrument of disposal that might prejudice the needs or interests of the armed forces, is granted only after consultation with the Department of Defense.

§ 155.11 Form and content of requests for release.

(a) A request for the release of surplus airport property from a term, condition, reservation, or restriction in an instrument of disposal need not be in any special form, but must be in writing and signed by an authorized official of the public agency that owns the airport.

(b) A request for a release under this part must be submitted in triplicate to the District Airport Engineer in whose district the airport is located.

(c) Each request for a release must include the following information, if applicable and available:

(1) Identification of the instruments of disposal to which the property concerned is subject.

(2) A description of the property concerned.

(3) The condition of the property concerned.

(4) The purpose for which the property was transferred, such as for use as a part of, or in connection with, operating the airport or for producing revenues from nonaviation business.

(5) The kind of release requested.

(6) The purpose of the release.

(7) A statement of the circumstances justifying the release on the basis set forth in § 155.3(a) (1) or (2) with supporting documents.

(8) Maps, photographs, plans, or similar material of the airport and the property concerned that are appropriate to determining whether the release is justified under § 155.9.

(9) The proposed use or disposition of the property, including the terms and conditions of any proposed sale or lease and the status of negotiations therefor.

(10) If the release would allow sale of any part of the property, a certified copy of a resolution or ordinance of the governing body of the public agency that owns the airport obligating itself to use the proceeds of the sale exclusively for developing, improving, operating, or maintaining a public airport.

(11) A suggested letter or other instrument of release that would meet the requirements of State and local law for the release requested.

(12) The sponsor's environmental assessment prepared in conformance with Appendix 6 of FAA Order 1050.1C, "Policies and Procedures for Considering Environmental Impacts" (45 FR 2244; January 10, 1980), and FAA Order 5050.4, "Airport Environmental Handbook" (45 FR 56624; August 25, 1980), if an assessment is required by Order 5050.4. Copies of these orders may be examined in the Rules Docket, Office of the Chief Counsel, FAA, Washington, D.C., and may be obtained on request at any FAA regional office headquarters or any airports district office.

[Doc. No. 1329, 27 FR 12361, Dec. 13, 1962, as amended by Amdt. 155-1, 45 FR 56622, Aug. 25, 1980]

§ 155.13 Determinations by FAA.

(a) An FAA office that receives a request for a release under this part, and supporting documents therefore, examines it to determine whether the request meets the requirements of the Act of October 1, 1949 (63 Stat. 700) so far as it concerns the interests of the United States in civil aviation and whether it might prejudice the needs and interests of the armed forces. Upon a determination that the release might prejudice those needs and interests, the Department of Defense is consulted as provided in § 155.9(b).

(b) Upon completing the review, and receiving the advice of the Department of Defense if the case was referred to it, the FAA advises the airport owner as to whether the release or a modification of it, may be granted. If the release, or a modification of it acceptable to the owner, is granted, the FAA prepares the necessary instruments and delivers them to the airport owner.

PART 157—NOTICE OF CONSTRUCTION, ALTERATION, ACTIVATION, AND DEACTIVATION OF AIRPORTS

Sec.

157.1 Applicability.
157.3 Projects requiring notice.
157.5 Notice of intent.
157.7 FAA determination.
157.9 Notice of completion.

AUTHORITY: Secs. 309, 313(a), 314, 72 Stat. 751; 49 U.S.C. 1350, 1354(a), 1355.

§ 157.1 Applicability.

This part applies to persons proposing to construct, alter, activate, or deactivate a civil or joint-use (civil/military) airport, and sets forth requirements for notice to the Administrator as prescribed in § 157.3. This part does not apply to any project for which Federal aid has been requested under the Federal Airport Act, the Airport and Airway Development Act of 1970 or to any project involving a temporary airport which is intended to be used solely in VFR weather conditions for a period of less than 30 consecutive days with no more than 10 operations a day.

[Amdt. 157-2, 35 FR 8274, May 27, 1970, as amended by Amdt. 157-3, 37 FR 5932, Mar. 23, 1972]

§ 157.3 Projects requiring notice.

Except as provided in § 157.1, each person who intends to do any of the following shall notify the Administrator in the manner prescribed in § 157.5:

(a) Construct or otherwise establish a new airport or activate an airport.

(b) Construct, realign, alter, or activate any runway, landing strip, or associated taxiway.

(c) Deactivate, discontinue using, or abandon an airport, runway, landing strip, or associated taxiway for a period of one year or more.

(d) Change the status of an airport from personal use (exclusive use by the owner), or private use (use by the owner or other persons authorized by the owner), to an airport open to the public.

[Doc. No. 6739, 31 FR 1270, Feb. 2, 1966]

§ 157.5 Notice of intent.

Except as provided in paragraphs (a), (b), (d), and (e) of this section, the notice required by § 157.3 shall be submitted, in triplicate, on FAA Form 7480-1, to the nearest FAA Area Manager's Office or FAA Airport District Office at least 90 days before work is to begin. However, in an emergency involving essential public service, public health, or public safety, or when delay would result in an unreasonable hardship, a proponent may notify the FAA by telephone, or any other expeditious means, and send FAA Form 7480-1 within five days thereafter.

(a) Information concerning a personal or private use airport for fixed wing aircraft used solely in VFR weather conditions and located more than 20 nautical miles from any airport for which an instrument approach procedure is authorized, and more than five nautical miles from any airport open to the public, shall be submitted on FAA Form 7480-1 at least 30 days before work is to begin. After stating whether the project is one of alteration or establishment, only Items A, B, D, and I of the form need be filled out.

(b) Information concerning a personal or private use heliport for use solely in VFR weather conditions shall be submitted on FAA Form 7480-1 at least 30 days before work is to begin if the project is located—

(1) Outside of a control zone, or outside of a residential, a business, or an industrial area;

(2) More than 10 nautical miles from any airport for which an instrument approach procedure has been authorized;

(3) More than 3 nautical miles from any other airport, other than a heliport; and

(4) More than 1 nautical mile from any other heliport.

After stating whether the project is one of alteration or establishment, only Items A, B, D, and I of the form need be filled out.

(c) Information received under paragraphs (a) and (b) of this section is normally used only for record purposes unless the FAA determines that an aeronautical study is required.

(d) Except as provided in paragraph (e) of this section, information concerning the deactivation, discontinued use, or abandonment of an airport, runway, landing strip, or associated taxiway shall be submitted either by letter or on FAA Form 7480-1, and prior notice is not required. Any information received under this section will be used for record purposes only unless the affected property is subject to any agreement with the United States requiring that it be maintained and operated as a public airport.

(e) Information concerning the deactivation, discontinued use or abandonment of an airport, runway, or landing strip with an established instrument approach procedure shall be submitted at least 30 days prior to such deactivation, discontinued use, or abandonment on FAA Form 7480-1. Copies of FAA Form 7480-1 may be obtained from the nearest FAA Airport District Office or Regional Office.

[Amdt. 157-2, 35 FR 8274, May 27, 1970, as amended by Amdt. 157-3, 37 FR 5932, Mar. 23, 1972]

§ 157.7 FAA determination.

(a) The Federal Aviation Administration makes aeronautical studies of airport proposals and after consultations are held with interested persons, as appropriate, advises those concerned of the FAA determination. This determination will be based on considerations of the safe and efficient use of airspace by aircraft. In making the determination, the FAA will consider matters such as the effects it would have on existing or contemplated traffic patterns of neighboring airports, the effects it would have on the existing airspace structure and projected programs of the FAA and the effects that existing or proposed manmade objects (on file with the FAA) and natural objects within the affected area would have on the airport proposal. These determinations will fall within one of the following categories:

(1) No objection to the proposal;

(2) No objection to the proposal if certain conditions are met, such as the execution of aircraft operations in VFR weather conditions only, the establishment of traffic patterns compatible with those of adjacent airports, the exclusive use of the airport by the owner, and such other conditions as the FAA may require; or

(3) Objectionable, including reasons for the objections.

(b) The FAA may establish void dates for certain determinations to permit orderly planning. Determinations are furnished to the proponent, aviation officials of the State concerned, and, when appropriate, local political bodies and other interested persons.

[Amdt. 157-2, 35 FR 8274, May 27, 1970]

§ 157.9 Notice of completion.

Within 30 days after completion of an airport project covered by this Part 157, the construction proponent shall notify the nearest FAA Airport District Office or regional office by letter or post card of the fact of completion.

[Amdt. 157-2, 35 FR 8275, May 27, 1970, as amended by Amdt. 157-3, 37 FR 5932, Mar. 23, 1972]

PART 159—NATIONAL CAPITAL AIRPORTS

Subpart A—General

Sec.
159.1 Applicability.
159.2 Motor vehicles carrying passengers for hire on Washington National Airport.
159.3 [Reserved]
159.4 Motor vehicles carrying passengers for hire on Dulles International Airport.
159.5 Lost articles.

Subpart B—Motor Vehicle Rules

159.11 Applicability of Virginia laws.
159.13 Special operating rules.
159.15 Operator's license.
159.17 Speed.
159.19 Passenger's occupancy.
159.21 Emergency vehicles; right-of-way.
159.23 Parking.
159.25 Accident reports.
159.27 Repair of motor vehicles.
159.29 Busses.
159.31 Moving of motor vehicles.
159.33 License tags.
159.35 Use of access highway to Dulles International Airport.

Subpart C—Aircraft Rules

159.40 Nighttime noise limitations.
159.41 Confinement of aircraft operations.
159.43 Parking of aircraft.
159.47 Disabled aircraft.
159.48 Malfunctioning aircraft.
159.49 Accident reports.
159.51 Refusal of clearance.
159.53 Minimum pilot certificate requirement.
159.55 Registration of aircraft.
159.57 Demonstrations.
159.59 Aircraft equipment and operation rules
159.60 Nonstop operations.
159.61 Taxiing rules.
159.63 Use of gate positions.

Subpart D—Rules of Conduct

159.71 Applicable laws.
159.73 Sanitation.
159.75 Preservation of property.
159.77 Airport and equipment.
159.79 Dangerous objects.
159.81 Coin-operated machines.
159.83 False report.
159.85 Interfering or tampering with aircraft.
159.87 Repairing of aircraft.
159.89 Restricted areas.
159.91 Commercial activity.
159.93 Certain non-commercial activities.

Sec.
159.94 Prohibited conduct relating to noncommercial activity.
159.95 Commercial photography.
159.97 Use of roads and walks.
159.99 Animals.
159.101 Loitering.
159.103 Drugs.
159.105 Games.
159.107 Use of Airport and airspace.
159.109 Impersonation.
159.111 Forgery and counterfeiting.

Subpart E—Fire Hazards and Fueling Operations

159.121 Cleaning fluids.
159.123 Open-flame operations.
159.125 Smoking.
159.127 Storage.
159.129 Apron surface areas and floor surfaces.
159.131 Doping.
159.133 Fueling operations.
159.135 Radio operation.
159.137 Operating motor vehicles in hangar.
159.139 Grounding of aircraft in hangars.
159.141 Runway foaming services.

Subpart F—Obligations of Tenants

159.151 Use of premises.
159.153 Trash containers.
159.155 Bulletin boards.
159.157 Storage of equipment.
159.159 Fire apparatus.
159.161 Discrimination or segregation.

Subpart G—Mobile Lounges at Dulles International Airport

159.171 Scope.
159.173 Rules of conduct.
159.175 Rules governing mobile lounge service.

Subpart H—Charges

159.181 Landing charges.
159.183 Computation of weight for payment of charges.
159.185 Payment for services.

Subpart I—Enforcement

159.191 Penalties.

AUTHORITY: D.C. Code, Title 2-1602; sec. 2, 54 Stat. 658; secs. 4 and 8, 64 Stat. 770, unless otherwise noted.

SOURCE: Docket No. 1307, 27 FR 9444, Sept. 22, 1962, unless otherwise noted.

Subpart A—General

§ 159.1 Applicability.

(a) This part prescribes the rules governing the use and occupancy of the following airports (in this part referred to as "the Airport"):

(1) Washington National Airport as described in section 1301 of Title 7 of the District of Columbia Code, 1961 Edition, and including buildings and facilities of that airport.

(2) Dulles International Airport, consisting of the land and access road, located in Fairfax and Loudoun counties, Virginia, acquired in Civil Actions Nos. 1638M and 1902M, United States District Court for the Eastern District of Virginia, Alexandria Division, and including buildings and facilities on that airport.

(b) The Director of the Bureau of National Capital Airports and with respect to each Airport, the Airport's Manager may issue such orders and instructions as are necessary for administering this part. The Manager of each Airport described in paragraph (a) of this section may post signs at the Airport to which he is assigned which state or apply outstanding rules, regulations, orders or instructions. Each person on the Airport shall comply with these orders, instructions, and signs.

[Doc. No. 1584, 28 FR 1036 Feb. 2, 1963, as amended by Amdt. 159-3, 28 FR 9384, Aug. 27, 1963; Amdt. 159-11, 33 FR 18367, Dec. 11, 1968]

§ 159.2 Motor vehicles carrying passengers for hire on Washington National Airport.

(a) No person may operate a taxicab or other motor vehicle on Washington National Airport for the purpose of picking up a passenger for hire unless he operates in accordance with one of the following conditions:

(1) He has a contract with the United States authorizing him to pick up passengers for hire on that airport.

(2) He operates a taxicab, in other than a taxicab pickup zone, to carry immediately from that airport a passenger picked up in response to a prior request, and his manifest shows the time the request was made, the name

of the person to be picked up, and the time and the point of the pickup.

(3) He operates a taxicab, in other than a taxicab pickup zone, to carry immediately from that airport a passenger picked up, without a prior request, at the point of and immediately upon discharge of another passenger delivered there.

(4) He operates a taxicab on that airport to pick up a person or persons within an area designated as a taxicab pickup zone and pays a $.50 fee for each such pickup (individual or group). However, the airport manager may designate hours of operation during which a fee need not be paid.

(b) No person may operate a taxicab or other motor vehicle on Washington National Airport for the purpose of picking up or discharging a passenger for hire unless he complies with each of the following requirements:

(1) He may not solicit passengers.

(2) He may not carry in his vehicle a nonpaying passenger other than a trainee driver.

(3) He must obey all posted official airport signs and all lawful directions and signals of airport police.

(c) No person may operate a taxicab on Washington National Airport for the purpose of picking up a passenger for hire unless he complies with each of the following requirements:

(1) He must remain in his vehicle while waiting to enter a taxicab pickup zone or while in a taxicab pickup zone, except when assisting a passenger to enter the vehicle or when loading a passenger's baggage.

(2) He must accept as passengers those persons and only those persons assigned by the taxicab dispatcher, if the taxicab dispatcher is on duty at that pickup zone at the time the pickup is made.

(3) He must obey all lawful directions and signals of taxicab dispatchers.

(4) He must be licensed to operate a taxicab, and the taxicab must be licensed, by one of the following:

(i) The City of Alexandria;

(ii) The City of Falls Church;

(iii) Arlington County;

(iv) Fairfax County;

(v) Montgomery County;

(vi) Prince George's County;

(vii) The District of Columbia.

(5) He must have in his possession the licenses required by paragraph (c)(4) of this section.

(6) Upon the request of an airport police officer, he must surrender for inspection to that officer the licenses required by paragraph (c)(4) of this section.

(7) He must display in his taxicab, in a place conspicuous to passengers, his taxicab operator's license and a schedule of the rates issued by the Washington Metropolitan Area Transit Commission or the jurisdiction that has licensed his taxicab, as appropriate under paragraph (c)(9) of this section.

(8) He must permit airport police to inspect his taxicab to determine if he is displaying the license and rate schedule required by paragraph (c)(7) of this section.

(9) He must charge no more than the passenger fares prescribed by the Washington Metropolitan Area Transit Commission for interstate transportation, if his taxicab does not have a meter, or those prescribed by the jurisdiction that has licensed his taxicab, if his taxicab has a meter, when transporting a passenger from a point on Washington National Airport to:

(i) Another point on that airport;

(ii) A point on Dulles International Airport;

(iii) A point within the City of Alexandria or the City of Falls Church;

(iv) A point within the District of Columbia; or

(v) Any point within the outer geographical boundaries of Arlington County, Fairfax County, Montgomery County, or Prince George's County.

(d) As used in this section:

(1) The word "taxicab" means any motor vehicle that has a seating capacity of not more than eight passengers in addition to the operator, is being operated for the purpose of transporting passengers for hire between points along the public streets as the passengers may direct, and is not being operated on a regular route or schedule or between fixed terminals; and

(2) The words "taxicab dispatcher" means any person employed by or des-

ignated by the airport manager to direct the movement of taxicabs.

[Doc. No. 15075, 41 FR 19623, May 13, 1976]

§ 159.3 [Reserved]

§ 159.4 Motor vehicles carrying passengers for hire on Dulles International Airport.

(a) No person may operate a taxicab or other motor vehicle on Dulles International Airport for the purpose of picking up a passenger for hire unless he operates in accordance with one of the following conditions:

(1) He has a contract with the United States authorizing him to pick up passengers for hire on that airport.

(2) He operates a taxicab to carry immediately from that airport a passenger picked up in response to a prior request, and his manifest shows the time the request was made, the name of the person to be picked up, and the time and the point of the pickup.

(3) He operates a taxicab to carry immediately from that airport a passenger picked up, without a prior request, at the point of and immediately upon discharge of another passenger delivered there.

(b) No person may operate a taxicab or other motor vehicle on Dulles International Airport for the purpose of picking up or discharging a passenger for hire unless he complies with each of the following requirements:

(1) He may not solicit passengers.

(2) He may not carry in his vehicle a nonpaying passenger other than a trainee driver.

(3) He must obey all posted official airport signs and all lawful directions and signals of airport police.

(4) He must permit airport police to inspect his vehicle to determine if he is displaying, in a place conspicuous to passengers, his name tag and rate schedule.

(c) No person may operate a taxicab on Dulles International Airport for the purpose of picking up a passenger for hire unless he complies with each of the following requirements:

(1) He must remain in his vehicle while waiting to enter a taxicab pickup zone or while in a taxicab pickup zone, except when assisting a passenger to enter the vehicle or when loading a passenger's baggage.

(2) He must obey all lawful directions and signals of taxicab dispatchers.

(d) As used in this section:

(1) The word "taxicab" means any motor vehicle that has a seating capacity of not more than eight passengers in addition to the operator, is being operated for the purpose of transporting passengers for hire between points along the public streets as the passengers may direct, and is not being operated on a regular route or schedule or between fixed terminals; and

(2) The words "taxicab dispatcher" mean any person employed by or designated by the Airport Manager to direct the movement of taxicabs.

[Doc. No. 15075, 41 FR 19624, May 13, 1976]

§ 159.5 Lost articles.

Each person who finds a lost article on the Airport shall deposit it at the office of the Airport police branch. If the article is not claimed by its owner within 90 days after it is deposited, it may be returned to the finder.

Subpart B—Motor Vehicle Rules

§ 159.11 Applicability of Virginia laws.

(a) Section 13 of Title 18 of the United States Code makes applicable on Dulles International Airport and on Washington National Airport the laws of the Commonwealth of Virginia governing operation of motor vehicles on public highways, to the extent that those laws are not inconsistent with this part.

(b) The rules of conduct and prohibitions of Chapter 4, Regulation of Traffic, of title 46.1, Motor Vehicles, of the Code of Virginia, 1950, as amended, that carry penalties greater than a fine of not more than $500 or imprisonment for not more than six months, or both, are hereby incorporated by reference as provisions of this part, to the extent that they apply by their terms to the circumstances at the airport and are not inconsistent with specific provisions of this part. The penalties provided by Virginia law for violations of these rules and prohibitions are not incorporated.

[Amdt. 159-4, 30 FR 1037, Feb. 2, 1965]

§ 159.13 Special operating rules.

(a) No person may operate a motor vehicle on the landing area, ramp, or trucking concourse in the terminal building, unless—

(1) The vehicle has been inspected and approved by the Airport Manager or his agent; and

(2) That person holds a current operator's permit issued by the Airport Manager or is properly escorted by an Airport vehicle.

(b) The Airport Manager may issue a motor vehicle operator permit to any competent operator, that he considers necessary for the safe and efficient operation of the Airport. The Manager may in his discretion, revoke such a permit at any time.

(c) No person may operate a two-wheeled motor vehicle on the landing area, or ramp on the Airport.

(d) No person may ride a bicycle on the Airport without permission of the Airport Manager.

[Docket No. 1307, 27 FR 9444, Sept. 22, 1962, as amended by Amdt. 159-11, 33 FR 18367, Dec. 11, 1968]

§ 159.15 Operator's license.

(a) No person may operate any motor vehicle on an Airport road unless he holds a current operator's license issued by a political jurisdiction or governmental agency in the United States or a foreign country.

(b) No person may operate any U.S Government motor vehicle on the Airport unless he holds a current U.S. Government Motor Vehicle Operator's Identification Card.

[Amdt. 159-3, 28 FR 9385, Aug. 27, 1963, as amended by Amdt. 159-11, 33 FR 18367, Dec. 11, 1968]

§ 159.17 Speed.

(a) Unless otherwise authorized by the Airport Manager no person may operate a motor vehicle at a speed—

(1) Of more than six miles an hour in the baggage concourse in the terminal building;

(2) Of more than 15 miles an hour on any apron or ramp;

(3) Of more than 25 miles an hour on any taxiway, runway, restricted service road, or other aircraft movement area other than the apron or ramp; or

(4) Higher than the speed limit posted by the Airport Manager on any area of the Airport not covered by paragraphs (a) (1) through (3) of this section.

(b) No person may operate a motor vehicle on the Airport in a careless or reckless manner.

(c) Each person operating a motor vehicle on the Airport shall operate it so as to have it under proper control at all times, weather and traffic conditions considered.

[Doc. No. 1307, 27 FR 9444, Sept. 22, 1962, as amended by Amdt. 159-1, 28 FR 1036, Feb. 2, 1963; Amdt. 159-9, 31 FR 9865, July 21, 1966]

§ 159.19 Passenger's occupancy.

Except in a vehicle designed to carry passengers in such a manner, no person may, while on the Airport, ride on the running board of a moving motor vehicle, stand up in the body of a moving motor vehicle, ride on the outside of the body of a moving motor vehicle, or ride on such a vehicle with his arms or legs protruding from the body of the vehicle.

§ 159.21 Emergency vehicles; right-of-way.

Upon the approach of a police, ambulance, fire department, or other emergency vehicle giving an audible or visual signal that it is on an emergency call, each person operating another vehicle on any road on the Airport shall immediately drive his vehicle parallel with, and as near as possible to, the right hand edge of the road, clear of all intersections, and stay there until the emergency vehicle has stopped or passed, unless otherwise directed by an Airport police officer.

[Doc. No. 1307, 27 FR 9444, Sept. 22, 1962, as amended by Amdt. 159-11, 33 FR 18367, Dec. 11, 1968]

§ 159.23 Parking.

(a) No person may park or stand a motor vehicle on the Airport except in an area specifically designated for parking or standing.

(b) No person may park a motor vehicle in any area on the Airport for a period longer than is prescribed for that area by the Airport Manager.

(c) No person may park a motor vehicle on the Airport, except in an attended parking area, for a period longer than 72 hours, without the specific approval of the Manager.

(d) No person may park a motor vehicle in a metered parking space on the Airport without depositing the required amount of money (for the time stated on the meter) in the parking meter controlling that space. If, during the time a motor vehicle is parked in a space controlled by a meter, the meter shows that there is a violation, the owner or operator of the vehicle is violating this paragraph unless he shows that the meter was not working properly.

(e) No person may park a motor vehicle on the Airport in an area requiring payment for parking unless he pays the required amount.

(f) No person may park a motor vehicle in a restricted or reserved area on the Airport unless he displays, in the manner prescribed by the Manager, a parking permit issued by the Manager for that area.

(g) No person may double park a motor vehicle on any road on the Airport. For the purposes of this paragraph, parking a vehicle at such a distance from the curb that another vehicle could park between it and the curb, is considered to be double parking.

(h) No person may abandon a motor vehicle on the Airport.

(i) No person may park a motor vehicle on the Airport, in a space marked for the parking of vehicles, in a manner to occupy a part of another marked space.

(j) No person may leave a motor vehicle standing unattended or parked on the Airport with a key in the ignition switch, the motor running, a key in the door lock, or an open door.

(k) No person may park or stand a motor vehicle at any place on the Airport in violation of any sign posted by the Manager.

(l) No person may park or stand a motor vehicle within 10 feet of a fire hydrant on the Airport.

§ 159.25 Accident reports.

Each operator of a motor vehicle involved in an accident between that vehicle and an aircraft, or in any other motor vehicle accident, on the Airport, that results in personal injury or in total property damages of more than $50, shall report it fully to the Airport police office as soon as possible after the accident. The report must include the name and address of the person reporting.

[Amdt. 159-11, 33 FR 18368, Dec. 11, 1968]

§ 159.27 Repair of motor vehicles.

(a) Except for persons authorized by the Airport Manager and except for minor repairs necessary to move the vehicle from the Airport, no person may clean or repair a motor vehicle on a road or in a parking area of the Airport.

(b) No person may, on the Airport, move or interfere or tamper with any motor vehicle, put its motor into motion, or take or use any part, instrument, or tool of it, unless he has the permission of the owner or presents satisfactory evidence to the Manager of his right to do so.

§ 159.29 Busses.

No person operating a motor bus for hire may load or unload passengers at the Airport at a place other than that designated by the Airport Manager.

§ 159.31 Moving of motor vehicles.

The Airport Manager or his agent may tow away or otherwise move any motor vehicle on the Airport that is parked in violation of the regulations of the Airport, if the Manager or his agent determines that it is a nuisance or hazard. The Manager may charge a reasonable amount for the moving service and for the storage of the vehicle, if any. The vehicle is subject to a lien for that charge.

§ 159.33 License tags.

No person may operate, stand, or park a motor vehicle on any road or parking area on the Airport unless it has current license tags issued by an appropriate authority. Any motor vehicle that is found standing or parked on the Airport in violation of this section may be impounded by an Airport police officer and removed to the Airport police station or another area of the Airport designated for that purpose by the Airport Manager.

§ 159.35 Use of access highway to Dulles International Airport.

(a) Except in an emergency, and except as provided in paragraph (b) of this section, private vehicles may enter upon the Dulles Airport Access Highway only for the purpose of going to, or leaving, Dulles International Airport on airport related business, or, with the permission of the Airport Manager, to perform work on the Highway. Entry by any person upon the Dulles Airport Access Highway for a purpose not authorized by this section is a criminal offense. Violators are subject to a penalty under these regulations.

(b) *Exceptions.* Any person may enter upon and travel over the Access Highway in the following vehicles:

(1) Vehicles operated for the purpose of going directly to or from performances at the Wolf Trap Farm Park for the Performing Arts.

(2) Buses operated in common carriage of persons by companies holding a certificate of public convenience and necessity for an operation for which use of the highway is appropriate, and buses operated by the Fairfax County School System.

(3) Until January 1, 1985, or until the opening of the highway in the Dulles Access Highway right-of-way parallel to the Access Highway in both directions between Route 28 and Route 123, whichever is earlier:

(i) A vehicle occupied by 4 or more persons,

(ii) A vehicle occupied by 2 or 3 persons displaying a decal that bears an FAA approval permanently affixed to the front and rear bumpers of the vehicle, or

(iii) A vehicle occupied by the driver only and displaying a decal that bears an FAA approval permanently affixed to the front and rear bumpers of the vehicle.

(4) A vehicle described in paragraphs (b)(3) (i) and (ii) of this section shall be an authorized carpool and a vehicle described in paragraph (b)(3)(iii) of this section shall be an "authorized vehicle." The driver of such a carpool or vehicle shall operate in compliance with the requirements of road signs pertaining to the Access Highway erected or posted upon the Access Highway or the approaches thereto.

(c) Except in an emergency, no operator of a private vehicle may—

(1) Enter or leave the Access Highway through an entrance or exit road or ramp other than one constructed by the FAA as part of the Access Highway system;

(2) Make a U-turn on the Access Highway;

(3) Enter or cross the median strip of the Access Highway;

(4) Use an exit road or ramp to enter the Access Highway;

(5) Use an entrance road or ramp to leave the Access Highway; or

(6) Operate the vehicle in violation of speed limit signs and other operating signs posted on the Access Highway.

(Secs. 3 and 4 of the Second Washington Airport Act, 64 Stat. 770; sec. 313 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1359); sec. 6, Dept. of Transportation Act (49 U.S.C. 1655); Secs. 3 and 4 of the Second Washington Airport Act, 64 Stat. 770; sec. 313 of the Federal Aviation Act of 1958, as amended, 49 U.S.C. 1354(a); (49 U.S.C. 106(g)), (Revised, Pub. L. 97-449, January 12, 9830))

[Doc. No. 19939, 45 FR 22018, Apr. 3, 1980, as amended by Amdt. 159-28, 48 FR 51419, Nov. 8, 1983]

Subpart C—Aircraft Rules

§ 159.40 Nighttime noise limitations.

(a) Except in an emergency, and except as allowed by paragraph (b) of this section, no person may operate an aircraft at Washington National Airport after 9:59 p.m. and before 7:00 a.m. if the noise levels for the aircraft type and model set out in FAA Advisory Circular 36-3B, which is incorporated into this part by reference, exceed the applicable noise limit set forth below. No adjustment for gross weight will be allowed:

Arrivals: 85 dBA as generated on approach.

Departures: 72dBA as generated on takeoff.

(b) An operation scheduled to arrive before 10:00 p.m. and which is cleared for its approach before 10:30 p.m. shall not be subject to the noise limit for arrivals set forth in paragraph (a) of this section.

(c) Aircraft types and models which are not listed in Advisory Circular 36-3B may be operated at Washington National Airport if the FAA determines that the aircraft type and model would meet the noise limits of paragraph (a) of this section if it were tested in accordance with the procedures of Part 36 Appendix C of this chapter and the operator obtains approvals required by § 159.59(a).

(d) *Availability of advisory circular.* Advisory Circular 36-3B may be inspected and copied at any FAA Regional Office or General Aviation District Office. Copies of the circular are available free of charge and may be obtained from any of those offices or from the DOT Distribution Unit, M-443.1, Washington, D.C. 20590.

(Secs. 103, 307 (a), (b) and (c), 313(a), of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1303, 1348 and 1354); secs. 2 and 5 of the Act for the Administration of Washington National Airport, 54 Stat. 688 as amended by 61 Stat. 94; sec. 4 of the Second Washington Airport Act, 64 Stat. 770; sec. 6 of the Department of Transportation Act (49 U.S.C. 1655))

[Doc. No. 21955, 46 FR 58049, Nov. 27, 1981]

§ 159.41 Confinement of aircraft operations.

No person may operate an aircraft on the Airport except on a hard surface area unless otherwise authorized by the air traffic control tower. No person may use a taxi strip on the Airport for a takeoff or landing except as authorized by the Airport Manager.

[Doc. No. 1307, 27 FR 9444, Sept. 22, 1962, as amended by Amdt. 159-9, 33 FR 11076, Aug. 3, 1968]

§ 159.43 Parking of aircraft.

No person may park an aircraft in any area on the Airport other than that prescribed by the Airport Manager or his authorized representative. No employee of the FAA may make the United States responsible for the care or protection of any aircraft (other than of the United States) that is parked on the Airport.

§ 159.47 Disabled aircraft.

The owner of an aircraft or part thereof that is disabled shall have it promptly repaired or moved from the Airport unless he is required to delay it pending investigation of an accident. If he does not remove it within a reasonable time, the Airport Manager may remove it at the owner's expense and without liability for additional damage resulting from the removal.

§ 159.48 Malfunctioning aircraft.

No person may operate an aircraft on the ramp area or at any aircraft gate position on the Airport until the Airport Manager or his designee has allowed that operation if—

(a) That person has reported, has knowledge of, or has been advised of, an indication of a fire in the aircraft;

(b) The brakes of the aircraft are inadequate because they are malfunctioning; or

(c) The aircraft has completely lost power on one side.

Complete loss of power on one side in the case of three-engine aircraft means loss of power of the center and one other engine.

(Secs. 303(d), 307(b), 313(a), and 1107(a), 72 Stat. 747, sec. 1, 54 Stat. 686, sec. 5, 64 Stat. 770; 49 U.S.C. 1344, 1348, 1354, 1507; 15 U.S.C. 1001, 7 U.S.C. 1037)

[Amdt. 159-6, 30 FR 11349, Sept. 4, 1965]

§ 159.49 Accident reports.

(a) Each operator of an aircraft that is involved in an accident on the Airport shall report it fully to the Airport Manager within 24 hours after the accident. The report must include the name and address of the person reporting.

(b) In a case where a written report of the accident is otherwise required, a copy of that report may be given to the Manager instead of the one required by paragraph (a) of this section.

§ 159.51 Refusal of clearance.

The Airport Manager may delay or restrict any flight or other aircraft operation at the Airport for any reason that he considers justifiable.

§ 159.53 Minimum pilot certificate requirement.

No person operating a civil aircraft may land at or take off from the Airport (including touch and go operations) unless he holds at least a private pilot certificate.

[Amdt. 159-12, 34 FR 19192, Dec. 4, 1969]

§ 159.55 Registration of aircraft.

The pilot of each aircraft whose owner or lessee does not have a contract with the United States for the aircraft to use the Airport, shall register at the operations office of the Airport fixed-base operator immediately upon landing and shall report to that operations office before taking off.

[Doc. No. 1307, 27 FR 9444, Sept. 22, 1962, as amended by Amdt. 159-8, 31 FR 9865, July 21, 1966]

§ 159.57 Demonstrations.

No person may give a flight or ground demonstration on the Airport, and no person may bring an aircraft to the Airport for an aerial demonstration within the Airport control zone without the specific approval of the Airport Manager. This section does not apply to courtesy flights, with new equipment, by air carriers.

§ 159.59 Aircraft equipment and operation rules.

(a) No person may operate at Washington National Airport an air carrier aircraft of a type not regularly operated at that airport as of July 1, 1981, unless approved by the Administrator, on a safety basis, and the Director of Metropolitan Washington Airports. The Director may request the person proposing to operate aircraft of this type at Washington National to submit a plan describing how the aircraft operation will be compatible with the airport facilities, including a description of the aircraft type, the schedule, and the gate positions proposed to be used. The Director shall base his approval or denial on the compatibility of the operation with National Airport's apron, gate, baggage, passenger handling, and roadway facilities.

(b) Except in an emergency, no person may operate a four engine turbojet transport category aircraft at Washington National Airport.

(c) After April 25, 1981, no person may operate at Washington National Airport a transport category aircraft of a type not regularly operated at that airport as of January 15, 1980, except as authorized by the director of Metropolitan Washington Airports. The Director may request the person proposing to operate aircraft of this type at Washington National to submit a plan describing how the aircraft operation will be compatible with the airport facilities, including a description of the aircraft type, the schedule, and the gate position proposed to be used. The Director shall base his authorization or denial on the compatibility of the operation with the National Airport facility.

(d) Except when authorized by the Airport Manager, no person may operate a fixed-wing aircraft on the Airport unless it has a tail or nose wheel and wheel brakes.

(e) Nothwithstanding paragraphs (c) and (d) of this section, an aircraft that has wings and tail higher than five feet from the ground and does not have adequate brakes may not be taxied on the airport under any conditions, and must be towed if it is necessary to move it.

(Secs. 103, 307 (a), (b), and (c), 313(a), of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1303, 1348 and 1354); secs. 2 and 5 of the Act for the Administration of Washington National Airport, 54 Stat. 688 as amended by 61 Stat. 94; sec. 4 of the Second Washington Airport Act, 64 Stat. 770; sec. 6, Dept. of Transportation Act (49 U.S.C. 1655))

[Doc. No. 1307, 27 FR 9444, Sept. 22, 1962, as amended by Amdt. 159-23, 46 FR 3500, Jan. 15, 1981; Amdt. 159-27, 46 FR 58049, Nov. 27, 1981]

§ 159.60 Nonstop operations.

No person may operate an air carrier aircraft nonstop between Washington National Airport and any airport that is more than 1,000 statute miles away from Washington National Airport.

(Secs. 103, 307(a), (b) and (c), 313(a), of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1303, 1348(a), (b) and (c), and 1354(a)); secs. 2 and 5 of the Act for the Administration of Washington National Airport, 54 Stat. 688 as amended by 61 Stat. 94; sec. 4 of the Second Washington Airport Act, 64 Stat. 770; sec. 6 of the Department of Transportation Act (49 U.S.C. 1655))

[Doc. No. 21955, 46 FR 58049, Nov. 27, 1981]

§ 159.61 Taxiing rules.

(a) No person may move an aircraft on the Airport in a careless or reckless manner.

(b) No person may start or run an engine in an aircraft on the Airport unless there is a competent person in the aircraft at the engine controls, and unless blocks have been placed in front of the wheels or the aircraft has adequate parking brakes.

(c) No person may run an engine of an aircraft parked on the Airport in a manner that damages any other property or aircraft, or that blows paper, dirt, or other material across taxiways or runway, so as to endanger the safety of operation on the Airport.

(d) Each person operating an aircraft on a part of the Airport that is not under the direction of air traffic control shall comply with the orders, signals, and directions of the authorized representative of the Airport Manager.

(e) No person may start or taxi any aircraft on the Airport in a place where the exhaust blast is likely to cause injury to persons or property. If the aircraft cannot be taxied without violating this paragraph, the operator must have it towed to the desired destination.

(f) Each person operating a large propeller-driven aircraft shall lower its flaps when taxiing out of an aircraft gate position.

(g) No person may move a rotorcraft at a place on the Airport (other than a heliport) while its rotors are turning unless there is a clear area of at least 50 feet from the outer tip of each rotor. No person may move a rotorcraft at a heliport while its rotors are turning unless there is a clear area of at least 20 feet from the outer tip of each rotor.

§ 159.63 Use of gate positions.

(a) No person may use an aircraft gate position on the Airport unless he has been authorized to use it.

(b) Except in an emergency, no person may enplane or deplane passengers on the Airport in an area that has not been established for that purpose by the Airport Manager.

(c) No person operating a private, itinerant, nonscheduled, or military aircraft may park, stand, unload passengers, obstruct or attempt to use any aircraft gate position assigned to a scheduled air carrier, without the advance approval of the Airport Manager.

(d) Except when specifically authorized by the Airport Manager, no person may double park an aircraft at a passenger gate.

(e) No person may enplane or deplane passengers from a double parked aircraft through any gate other than the gate at which the aircraft is parked.

(f) Each person operating a jet aircraft on the Airport shall use only the gates designated by the Airport Manager for jet aircraft.

Subpart D—Rules of Conduct

§ 159.71 Applicable laws.

Pursuant to section 13 of Title 18, United States Code, and except as otherwise provided in this part, the criminal laws of Virginia relating to the following apply on the Airport:

(a) Disorderly conduct.
(b) Gambling.
(c) Obscene literature.
(d) Drunkenness.

[Doc. No. 1307, 27 FR 9444, Sept. 22, 1962, as amended by Amdt. 159-11, 33 FR 18368, Dec. 11, 1968]

§ 159.73 Sanitation.

(a) No person may release, deposit, blow, or spread any bodily discharge on the floor, wall, partition, furniture, or any other part of a public comfort station, terminal building, hangar, or other building on the Airport, other than directly into a fixture provided for that purpose.

(b) No person may place any foreign object in any plumbing fixture of a public comfort station, terminal building, hangar, or other building on the Airport.

(c) No person may dispose of sewerage, garbage, refuse, paper, or other material on the Airport except in a receptacle provided for that purpose.

(d) No person may eat food or drink a beverage on the Airport except in areas specifically designed for that purpose.

§ 159.75 Preservation of property.

No person may, without the specific permission of the Airport Manager:

(a) Destroy, injure, deface, or disturb any building, sign, equipment, marker, or other structure, tree, flower, lawn, or other public property on the Airport;

(b) Walk on a lawn or seeded area of the Airport;

(c) Alter, add to, or erect any building on the Airport;

(d) Make an excavation on the Airport; or

(e) Willfully abandon any personal property on the Airport.

§ 159.77 Airport and equipment.

No person may interfere or tamper with, or injure, any part of the Airport or its equipment.

§ 159.79 Dangerous objects.

(a) No person except a Peace Officer, an authorized post office, Airport, or air carrier employee, or a member of an Armed Force on official duty, may carry any weapon, explosive, or inflammable material on or about his person, openly or concealed, on the Airport without the written permission of the Airport Manager.

(b) No person may furnish, give, sell, or trade a weapon on the Airport.

(c) For the purposes of this section a weapon includes a gun, dirk, bowie knife, black jack, switch blade knife, slingshot, or metal knuckles.

§ 159.81 Coin-operated machines.

No person may, on the Airport:

(a) Use or attempt to use a coin-operated machine that requires the deposit of a coin for its use, without first depositing the coins required by the instructions on the machine;

(b) Place or attempt to place, in a coin-operated machine a slug, foreign coin, or object other than the coin required by the instructions on the machine; or

(c) Pass through, over, or under a turnstile that requires the deposit of a coin for its use, without first depositing the required coin in the turnstile.

§ 159.83 False report.

No person may make a false report of conduct on, or the operation or use of, the Airport to the Airport Manager or any Airport police officer.

§ 159.85 Interfering or tampering with aircraft.

No person may interfere or tamper with an aircraft on the Airport or put its engine in motion, or use any aircraft, aircraft parts, instruments, or tools on the Airport, without the permission of the owner.

§ 159.87 Repairing of aircraft.

No person may repair an aircraft, aircraft engine, propeller, or apparatus in an area of the Airport other than that specifically designated for that purpose by the Airport Manager. However, this does not prevent a minor adjustment being made while the aircraft is on a loading ramp preparing to takeoff, if the adjustment is necessary to prevent a delayed takeoff.

§ 159.89 Restricted areas.

(a) Except as otherwise provided in this part, no person may, without the written permission of the Airport Manager, enter any restricted area on the Airport that is posted as closed to the public.

(b) No person may enter the aerodrome, the control tower, any hangar, the apron, or any other part of the Airport specified by the Airport Manager except—

(1) A person assigned to duty at that place;

(2) An authorized representative of the Administrator or the Civil Aeronautics Board;

(3) A passenger who, under appropriate supervision, is entering the apron to embark or debark; or

(4) Any other person authorized by the Manager, or by a tenant for an area he occupies.

§ 159.91 Commercial activity.

(a) No person may engage in any commercial activity on the Airport without the approval of, and under terms and conditions prescribed by, the Airport Manager.

(b) For the purpose of this section "commercial activity" means any activity undertaken for profit including the sale, provision, advertisement or display of goods or services.

[Doc. No. 20200, 45 FR 35320, May 27, 1980]

§ 159.93 Certain non-commercial activities.

(a) This section applies to the following activities undertaken not for profit but for non-commercial purpose (hereinafter referred to as "non-commercial" activities):

(1) The distribution of any written or printed matter to the general public including distribution for the conduct of surveys and petitions. The distribution of items or material other than printed material will be treated as a "commercial activity" under this part.

(2) The solicitation of funds from the general public whether or not in connection with the distribution of written or printed matter.

(3) The sale of written or printed matter. All other sales of any material, items, or services will be treated as a "commercial activity" under this part.

(b) Each person conducting any non-commercial activity must hold a valid permit issued by the Airport Manager and conduct the activity in conformity with applicable laws, regulations and the terms of the permit. Each permit shall describe the activity authorized and the area in which it may be conducted.

(c) *Procedure.* Unless by prior application all available permits have been granted, applications will be processed as follows:

(1) Each person who seeks to distribute written or printed matter without soliciting funds or selling such matter shall immediately be given a single permit for leafletting for noncommercial purposes upon his request.

(2) Each person who seeks to solicit contributions or sell written or printed matter may do so only in connection with religious expression or as a representative of a noncommercial organization. Each such person shall immediately be given a single permit upon submission of an application, signed by the applicant, containing the following:

(i) The applicant's name, address, and telephone number.

(ii) The name, address, and telephone number of the organization that the applicant purports to represent, and a letter or other documentation that the applicant has authority to represent that organization. (This submission is not required of an individual who would be soliciting in connection with religious expression and who is not representing an organization.)

(iii) The name and title of the person in the organization who will have supervision of and responsibility for the activity at the airport, if applicable.

(iv) A statement that the sale of printed matter and/or the solicitation of funds is for noncommercial purposes.

(v) One of the following:

(A) A statement signed by the applicant that the applicant represents, and will be soliciting funds or selling written or printed matter for the sole benefit of, a religion or religious group.

(B) A statement signed by the applicant that the applicant represents, and will be soliciting funds or selling written or printed matter for the sole benefit of, a political organization a function of which is to influence the nomination, election, or appointment of one or more individuals to Federal, state, or local public office; to influence Federal, state, or local legislation; or to advocate issues or causes to the public.

(C) A statement signed by the applicant that the applicant's organization has received an official Internal Revenue Service (IRS) ruling or letter of determination stating that the organization or its parent organization qualifies for tax-exempt status under 26 U.S.C. 501 (c)(3), (c)(4), or (c)(5).

(D) A statement signed by the applicant that the applicant's organization has applied to the IRS for a determination of tax-exempt status under 26 U.S.C. 501 (c)(3), (c)(4), or (c)(5), and that the IRS has not yet issued a final administrative ruling or determination on such status.

(E) A statement signed by the applicant that the applicant's organization has on file with the Virginia Administrator of Consumer Affairs a current registration statement in accordance with the Virginia Annotated Code, Section 57-49 (1978 Cumulative Supplement), "Registration of Charitable Organizations."

(d) Failure to submit the information required by paragraph (c) of this section shall result in denial of a solicitation permit. Upon request, for a leafletting permit, or upon submission of a completed signed application, for a solicitation permit, a permit shall be issued unless all available permits have been issued to prior applicants.

(e) Applications for permits must be submitted to the Operations Office of the airport concerned. Permits will be granted on a a "first come, first served" basis. The area will be granted on a "first come, first choice" basis. The permits are not transferable except among individuals who have completed and submitted applications for the same permit.

(f) *Duration.* Each permit shall authorize the holder to conduct non-commercial activities for a period of 48 hours. Permits shall not be extended or renewed. After the expiration of the permit a new leafletting or solicitation permit may be issued to the former permit holder upon request or submission of a new application respectively. In such a case, applicants may be permitted to incorporate by reference any required documentation filed with a previous application.

(g) *Areas.* Each permit shall specify the area in which the non-commercial activity may be conducted by the permit holder. Permits shall be issued for the following areas up to the maximum number indicated:

(1) Washington National Airport:

(i) The Northwest/Trans World Airlines lobby (2).

(ii) The American Airlines lobby (1).

(iii) The main concourse and balcony (2).

(iv) The north terminal (2).

(v) The sidewalk in front of the Piedmont Aviation Terminal (1).

(2) Dulles International Airport between 4 p.m. and 8 p.m.

(i) Upper level main concourse south of ticketing area (4).

(ii) Lower level south concourse (1).

(iii) Lower level east (1).

(iv) Lower level west (1).

The areas are on display on a floor plan at the Operations Office of each Airport.

(h) Nothing in this part shall be construed as impairing or expanding any right which an airport lessee may otherwise have, by virtue of its leasehold interest in airport premises, to regulate access to those areas under its exclusive control.

[Doc. No. 20200, 45 FR 35320, May 27, 1980, as amended by Amdt. 159-21, 45 FR 70238, Oct. 23, 1980]

§ 159.94 Prohibited conduct relating to non-commercial activity.

No person may conduct non-commercial activity:

(a) Without a permit or with a permit that has expired.

(b) With a permit issued in response to an intentionally false application.

(c) With a permit outside the area designated on the permit.

(d) Within 10 feet of the following:

(1) A ticket counter,

(2) A baggage claim facility,

(3) A departure gate check-in counter,

(4) A departure gate lounge,

(5) An anti-hijack security screening point,

(6) Premises leased for the exclusive use of a concessionaire,

(7) Restroom facilities,

(8) A stair, escalator or elevator,

(9) A doorway or entrance way,

(10) A motor vehicle with embarking or disembarking passengers,

(11) A public service information counter,

(12) Persons waiting in line at any of the above listed areas.

(e) If that person is selling written or printed matter or soliciting funds, without wearing or displaying, in a conspicuous manner, a solicitation permit and the name of the organization that the person represents.

(f) By use of threatening gestures, or by language directed at another person in a manner intended to harass that other person.

(g) By intentionally touching or making physical contact with another person unless that other person has consented to such physical contact.

(h) By repeatedly attempting to distribute written or printed matter to, or to solicit funds from, another person when that other person has indicated to the solicitor that he or she does not wish to accept any matter or to make a donation.

(i) By use of a loudspeaker, sound or voice amplifying apparatus without the permission of the Airport Manager.

(j) By setting up a table, counter or stand without the permission of the Airport Manager.

(Secs. 2 and 4 of the Act for the Administration of Washington National Airport, 54 Stat. 686 as amended by 61 Stat. 94; secs. 4 and 10 of the Second Washington Airport Act, 64 Stat. 770; sec. 313 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1359); sec. 6, Department of Transportation Act (49 U.S.C. 1655); sec. 501 of Pub. L. 96-193, February 18, 1980))

[Doc. No. 20200, 45 FR 35321, May 27, 1980, as amended by Amdt. 159-21, 45 FR 70239, Oct. 23, 1980]

§ 159.95 Commercial photography.

(a) Except as provided in paragraph (b) of this section, no person may take a still, motion, or sound picture on the Airport for commercial purposes without the permission of the Administrator.

(b) The Airport Manager may allow any of the following to take pictures on the Airport for commercial purposes:

(1) Professional photographers and motion picture cameramen photographing events on the Airport as representatives of news concerns or bona fide news publications.

(2) Professional photographers and motion picture cameramen photographing events at the Airport, for nonprofit exhibit, to stimulate interest in air commerce or travel, or for nonprofit educational purposes.

(3) Professional photographers photographing scenes on the Airport for general artistic purposes.

§ 159.97 Use of roads and walks.

(a) No person may travel on the Airport except on a road, walk, or other place provided for the kind of travel he is doing.

(b) No person may occupy or place an object on a road or walk on the Airport in a manner that hinders or obstructs its proper use.

(c) No person may walk in a picket line as a picket or take part in a labor or other public demonstration on any part of the Airport except a place specifically assigned by the Airport Manager for picket lines or other public demonstrations.

(d) No person may operate any vehicle for the disposal of garbage, ashes or other waste material on the Airport without the approval of the Airport Manager.

§ 159.99 Animals.

(a) No person may enter the Airport with a domestic or wild animal without the written permission of the Airport Manager, except a:

(1) Person entering any part of the Airport (other than the terminal building, gate loading area, or other restricted area) with a domestic animal that is kept restrained by a leash or is confined so as to be completely under control;

(2) Person entering the terminal building or gate loading area with a small domestic animal (such as a dog or cat) that is to be transported by air and is kept restrained by a leash or is confined so as to be completely under control; or

(3) Blind person entering the terminal building or gate loading area with a seeing-eye dog.

(b) No person may hunt, fish, pursue, trap, catch, injure or kill any bird, fish, or animal on the Airport, except when specifically authorized by the Airport Manager.

(c) No person may ride horseback on the Airport without permission of the Airport Manager.

[Doc. No. 1307, 27 FR 9444, Sept. 22, 1962, as amended by Amdt. 159-11, 33 FR 18368, Dec. 11, 1968]

§ 159.101 Loitering.

No person may loiter or loaf on any part of the Airport. If a loitering or loafing person is told by an Airport police officer to move on or leave the Airport, he shall do so.

§ 159.103 Drugs.

(a) Except for a physician or pharmacist licensed to practice by a State, possession, or the District of Columbia, no person, while on the Airport, may prescribe, dispense, sell, give away, offer to sell, or administer any dangerous drug, or have such a drug in his possession, with intent to sell, give away, or administer it.

(b) For the purpose of this section "dangerous drug" means any drug defined as a dangerous drug in section 54.440 of the Virginia Code, 1950.

§ 159.105 Games.

No person may, on the Airport, practice or play football, baseball, golf, tennis, bandy, hockey, shinny, or any other game in which a ball, stone, or other substance is thrown, struck, or otherwise propelled, except during a period and in an area designated by the Airport Manager for playing that game.

§ 159.107 Use of Airport and airspace.

(a) No person who has been denied the use of the Airport by the Airport Manager may enter on or use the Airport except while traveling through as a passenger in an interstate bus or taxi or while embarking or debarking as a passenger on an aircraft operating on the Airport.

(b) No person, except an employee of the United States performing his official duties or a person who has the specific permission of the Airport Manager, may prepare to operate, operate, or release a kite, parachute, or balloon, model aircraft, or rocket on the Airport.

§ 159.109 Impersonation.

No person, except a member of the Bureau of National Capital Airports Police Force, may:

(a) Represent himself as a member of that Force;

(b) Assume or exercise the functions, powers, duties, or privileges of a member of that Force; or

(c) Wear or have in his possession a badge, uniform, or other insignia that is, or purports to be, that worn by a member of the Force.

§ 159.111 Forgery and counterfeiting.

No person may make, possess, use, offer for sale, sell, barter, exchange, pass, or deliver any forged, counterfeit, or falsely altered ticket, permit, certificate, placard, sign, or other authorization or direction purporting to be issued by or on behalf of the Administrator or the Airport Manager in controlling, operating, maintaining, or protecting the Airport.

Subpart E—Fire Hazards and Fueling Operations

§ 159.121 Cleaning fluids.

(a) Except as provided in paragraph (b) of this section, no person may use a flammable volatile liquid having a flash point of less than 110 degrees Fahrenheit for cleaning purposes in a hangar or other building on the Airport.

(b) No person may use a flammable volatile liquid having a flash point of less than 110 degrees Fahrenheit to clean an aircraft, aircraft engine, propeller, or appliance, on the Airport, unless it is done in the open air or in a room specifically set aside for that purpose. If a room is used, it must be fireproofed, be equipped with automatic sprinklers, and have adequate and readily accessible fire extinguishing apparatus.

§ 159.123 Open-flame operations.

No person may conduct an open-flame operation on the Airport without the specific permission of the Airport Manager.

§ 159.125 Smoking.

No person may smoke on any Airport apron or ramps, in any hangar or shop, in any aircraft on the Airport, or in any other place on the Airport where smoking is specifically prohibited by the Airport Manager.

§ 159.127 Storage.

(a) No person may store or stock material or equipment on the Airport in a manner that constitutes a fire hazard.

(b) No person may keep or store any flammable liquid, gas, signal flare, or other similar material in a hangar or other building on the Airport. However, such a material may be kept in an aircraft in proper receptacles, in rooms or areas specifically approved for that storage by the Airport Manager, or in safety cans approved by appropriate insurance underwriters.

(c) No person may keep or store lubricating or waste oils in or about a hangar, except in a room specifically designated for oil storage. However, not more than a 12-hour supply of lubricating oil may be kept in or about a hangar in containers or receptacles approved by appropriate insurance underwriters.

(d) Each lessee of a hangar (or its sublessee) on the Airport shall provide suitable metal receptacles, with self-closing covers, for storing waste, rags and other rubbish, and shall remove all rubbish from its premises each day.

[Doc. No. 1307, 27 FR 9444, Sept. 22, 1962, as amended by Amdt. 159-11, 33 FR 18368, Dec. 11, 1968]

§ 159.129 Apron surface areas and floor surfaces.

(a) Each person to whom space on the Airport is leased, assigned, or made available for use shall keep the space free and clear of oil, grease, or other foreign materials that could cause a fire hazard or a slippery or otherwise unsafe condition.

(b) No person may use any material (such as oil absorbents or similar material) that creates an eye hazard when picked up, swirled, or blown about by the blast from an aircraft engine in any passenger loading area or other public area.

§ 159.131 Doping.

(a) No person may conduct a doping process on the Airport except in a properly designed, fireproof, and ventilated room or building in which all lights, wiring, heating, ventilation equipment, switches, outlets, and fixtures are explosion-proof, spark-proof, and vapor proof, and in which all windows and doors are easily opened.

(b) No person may enter or work in a dope room while doping processes are being conducted unless he is wearing spark-proof shoes.

§ 159.133 Fueling operations.

(a) No person may fuel or defuel an aircraft on the Airport while:

(1) Its engine is running or is being warmed by applying external heat;

(2) It is in a hangar or enclosed space;

(3) It is within 50 feet of any hangar or other building on the Airport; or

(4) Passengers are in the aircraft, unless a passenger loading ramp is in place at the cabin door, the door is open, and a cabin attendant is at or near the door.

(b) No person other than those covered by paragraph (a)(4) of this section and those persons necessarily engaged in the fueling or defueling may be within 100 feet of an aircraft that is being fueled or defueled.

(c) No person may start the engine of an aircraft on the Airport if there is any gasoline or other volatile flammable liquid on the ground underneath it.

(d) No person may operate a radio transmitter or receiver, or switch electrical appliances on or off, in an aircraft on the Airport, while it is being fueled or defueled.

(e) During the fueling of an aircraft, on the Airport, the dispensing apparatus and the aircraft must both be grounded in accordance with orders and instructions of the Airport Manager.

(f) Each person engaged in fueling or defueling, on the Airport, shall exercise care to prevent the overflow of fuel, and must have readily accessible and adequate fire extinguishers.

(g) During the fueling or defueling of an aircraft, on the Airport, no person may, within 50 feet of that aircraft, smoke or use any material that is likely to cause a spark or be a source of ignition.

(h) Each hose, funnel, or appurtenance used in fueling or defueling an aircraft on the Airport must be maintained in a safe, sound, and nonleaking condition and must be properly grounded to prevent ignition of volatile liquids.

§ 159.135 Radio operation.

No person may operate any radio equipment in an aircraft while the aircraft is in a hangar on the Airport if any maintenance work, other than radio maintenance, is being done on that aircraft.

§ 159.137 Operating motor vehicles in hangar.

No person may operate a motor vehicle in any hangar on the Airport unless its exhaust is protected by screens or baffles.

[Amdt. 159-11, 33 FR 18368, Dec. 11, 1968]

§ 159.139 Grounding of aircraft in hangars.

No person may park an aircraft in any hangar or other structure on the Airport unless the aircraft is grounded in accordance with the orders and instructions of the Airport Manager.

§ 159.141 Runway foaming services.

Each operator of an aircraft for which runway foaming services are provided on the Airport at his request shall pay the expenses arising from providing those services.

Subpart F—Obligations of Tenants

§ 159.151 Use of premises.

No lessee of Airport property may knowingly allow that property to be used or occupied for any purpose prohibited by this part.

§ 159.153 Trash containers.

(a) No tenant, lessee, concessionaire, or agent of any of them, doing business on the Airport, may keep uncovered trash containers on a sidewalk or road or in a public area of the Airport.

(b) No person may operate an uncovered vehicle to haul trash on the Airport.

(c) No person may operate a vehicle for hauling trash, dirt, or any other material on the Airport unless it is built to prevent its contents from dropping, sifting, leaking, or otherwise escaping.

(d) No person may spill dirt or any other material from a vehicle operated on the Airport.

§ 159.155 Bulletin boards.

Each lessee of a hangar or other operational area specified by the Airport Manager on the Airport shall maintain a bulletin board in a conspicuous place in his hangar or area. He shall post on that board current workmen's compensation notices, a list of competent physicians, a list of his liability insurance carriers, a copy of this part, and a copy of each pertinent order or instruction issued under this part.

§ 159.157 Storage of equipment.

No tenant or lessee of a hangar, shop facility, or other operational area specified by the Airport Manager on the Airport may store or stack equipment or material in a manner to be a hazard to persons or property.

§ 159.159 Fire apparatus.

Each tenant or lessee of a hangar, shop, facility, or other operational area specified by the Airport Manager on the Airport shall supply and maintain adequate and readily accessible fire extinquishers, approved by fire underwriters for the hazard involved, that the Airport Manager considers necessary.

§ 159.161 Discrimination or segregation.

All services performed in operating a facility at the Airport must be without discrimination or segregation as to race, creed, color, sex, or national origin.

[Amdt. 159-11, 33 FR 18368, Dec. 11, 1968]

Subpart G—Mobile Lounges at Dulles International Airport

§ 159.171 Scope.

(a) This subpart contains the rules specifically applicable to the mobile lounge service provided by the FAA at Dulles International Airport.

(b) "Carrier" means any person at whose request mobile lounge service is provided.

[Amdt. 159-5, 30 FR 8828, July 14, 1965]

§ 159.173 Rules of conduct.

Subpart D—Rules of Conduct of this part applies on board the mobile lounges except where inconsistent with this subpart.

[Amdt. 159-5, 30 FR 8828, July 14, 1965]

§ 159.175 Rules governing mobile lounge service.

(a) Not more than 102 persons may enter a mobile lounge to be carried on any trip, and the carrier may not admit more than this number to a mobile lounge.

(b) No person may enter a mobile lounge unless he is admitted by the carrier. The carrier may admit any person to a mobile lounge except—

(1) An unaccompanied child under 5 years of age, unless the carrier accepts him for transportation in the aircraft and he is attended by the carrier or its agent;

(2) A person in a wheelchair, unless he is in an "aircraft-type" portable seat and is attended to insure his mobility;

(3) A person on a stretcher;

(4) A person who appears to be intoxicated;

(5) A person whose clothing or equipment is in such a condition that it might soil, stain, or otherwise damage the lounge; and

(6) Any other person who is not acceptable for transportation by the carrier and whose physical or mental condition creates a hazard for himself or other persons in the lounge.

(c) No carrier may carry in a mobile lounge any baggage, pet or animal, equipment, or other property, and no person may bring any of these things on board a lounge, except—

(1) Checked baggage of a passenger who arrives at the check-in counter after the baggage carts have departed for the aircraft and there is no other practical method of transportation;

(2) Domestic pets and animals that are allowed by the carrier to travel in the passenger compartment of the aircraft;

(3) Firearms, rifles, or sporting guns that are disassembled or in cases and are acceptable for transportation by the carrier; and

(4) "Carry-on" baggage that, when carried by the passenger, meets any size, weight, and number-of-pieces requirements set by the carrier.

(d) No person may display, serve, or consume any food or beverage in a mobile lounge and no carrier may allow any person to do so.

(e) The Airport Manager may grant exceptions from paragraphs (b) or (c) of this section in any case on a showing that the use of other means of conveyance between terminal building and aircraft would constitute an unusual hardship, and that the persons or property to be transported on the mobile lounge have been or will be transported on the carrier's aircraft. Such an exception is granted only under conditions that will prevent danger or discomfort for any persons or injury to any property.

[Amdt. 159-5, 30 FR 8828, July 14, 1965, as amended by Amdt. 159-11, 33 FR 18368, Dec. 11, 1968]

Subpart H—Charges

§ 159.181 Landing charges.

(a) Except as provided in paragraphs (b) and (c) of this section, the charge for each landing of an aircraft at Washington National Airport or Dulles International Airport is as follows:

WASHINGTON NATIONAL AIRPORT

Basic landing charge:	
Turbojet powered aircraft, for each 1,000 lbs	$0.30
Reciprocating engine or turbopropeller powered aircraft, for each 1,000 lbs	12
Minimum landing charge:	
All aircraft except helicopters	4.00

DULLES INTERNATIONAL AIRPORT

Basic landing charge	
Turbojet powered aircraft, for each 1,000 lbs	$0.25
Reciprocating engine or turbopropeller powered aircraft, for each 1,000 lbs	.25
Minimum landing charge	
All aircraft	.75

(b) There is no landing charge under this subpart for the following:

(1) Aircraft of 3,500 pounds or less weight that are not engaged in commercial operations, and that land at Dulles International Airport.

(2) Public aircraft.

(3) Aircraft compelled to return after takeoff.

(c) Except for the minimum landing charges, the landing charges in paragraph (a) of this section do not apply to the holder of a domestic or flag air carrier operating certificate, issued under Part 121 of this chapter, or to the holder of operations specifications, issued under Part 129 of this chapter, if that certificate holder has a contract with the United States for the use of the particular airport by that aircraft, and the contract provides for the payment of named amounts, as landing charges, directly to the United States.

(31 U.S.C. 483a)

[Amdt. 159-10, 33 FR 12834, Sept. 11, 1968]

§ 159.183 Computation of weight for payment of charges.

For the purposes of § 159.181, the weight of an aircraft is the maximum authorized gross landing weight permitted for that aircraft by the appropriate aeronautical authority of the country in which it was made.

[Doc. No. 1675, 28 FR 7708, July 30, 1963]

§ 159.185 Payment for services.

Unless satisfactory credit arrangements have been made, a person who has used Airport facilities, or who owes for storage, supplies, repairs or other services by the Airport, must pay for them before takeoff.

[Doc. No. 1675, 28 FR 7708, July 30, 1963]

Subpart I—Enforcement

§ 159.191 Penalties.

(a) Any person who willfully and knowingly violates a rule prescribed in this part, including any provision incorporated by reference, or an order or instruction issued or a sign posted under this part, is guilty of a misdemeanor and, upon conviction thereof, shall be fined not more than $500, or imprisoned for not more than 6 months, or both.

(b) In addition to the penalties prescribed in paragraph (a) of this section, the Airport Manager may remove or eject any person from the Airport, if that person willfully and knowingly violates a rule prescribed in this Part, or an order or instruction issued by the Manager under this Part or any applicable State or Federal law. The Manager may deny the use of the Airport and its facilities to such a person if the Manager determines that the denial is necessary under the circumstances.

[Doc. No. 1307, 27 FR 9444, Sept. 22, 1962, as amended by Amdt. 159-4, 30 FR 1037, Feb. 2, 1965; Amdt. 159-5, 30 FR 8828, July 14, 1965]

PART 169—EXPENDITURE OF FEDERAL FUNDS FOR NONMILITARY AIRPORTS OR AIR NAVIGATION FACILITIES THEREON

Sec.
169.1 Applicability.
169.3 Application for recommendation and certification.
169.5 FAA determination.

AUTHORITY: Secs. 308, 313, 72 Stat. 750, 752; 49 U.S.C. 1349, 1354; 49 U.S.C. 1655.

§ 169.1 Applicability.

(a) This part prescribes the requirements for issuing a written recommendation and certification that a proposed project is reasonably necessary for use in air commerce or in the interests of national defense. The first two sentences of section 308(a) of the Federal Aviation Act of 1958 (49 U.S.C. 1349(a)): (1) Require such a recommendation and certification where Federal funds are to be expended for nonmilitary purposes for airports or air navigation facilities thereon; and (2) provide that any interested person may apply to the Administrator, under regulations prescribed by him, for a recommendation and certification.

(b) This part does not apply to projects for the expenditure of Federal funds for military purposes or for airports, or air navigation facilities thereon, operated by the Federal Aviation Administration.

[Doc. No. 9256, 34 FR 5718, Mar. 27, 1969]

§ 169.3 Application for recommendation and certification.

(a) Any interested person may apply to the Administrator for a recommendation and certification with respect to a proposed project for the acquisition, establishment, construction, alteration, repair, maintenance, or operation of an airport or an air navigation facility thereon by or in his interests, on which Federal funds are proposed to be expended for nonmilitary purposes. The application shall be filed with the Regional Airport Division or District Office, whichever is appropriate in whose geographical area the airport is located. The application must state—

(1) The name and address of the applicant, the owner of the airport, and the individual responsible for its operation and maintenance, and the interest of the applicant in the matter;

(2) The location of the airport, and of any air navigation facilities thereon;

(3) A technical description of the project;

(4) The information contained in the notice required by § 157.3 of this chapter; and

(5) All available pertinent data relating to the necessity of the airport or air navigation facility for use in air commerce including where applicable—

(i) The number and type of aircraft that use or would use the airport or facility;

(ii) The present and expected level of activity;

(iii) Any special use of the airport or facility such as its providing access to places of recreation as national forests or parks or to isolated communities where access by other means is not available or is curtailed by climatic condition; and

(iv) In the case of an airport or air navigation facility owned, operated, or maintained by a Federal agency other than the FAA, the relationship of the airport or facility to the performance of that agency's functions.

(b) Each of the following has the effect of a recommendation and certification, and a separate application under this part with respect thereto is not required:

(1) Approval of a project under section 16 of the Airport and Airway Development Act of 1970 (49 U.S.C. 1701).

(2) Inclusion of an airport in the National Airport System Plan, if—

(i) Notice of construction or alteration required by § 157.3 of this chapter has been given; and

(ii) The Administrator has determined that there is no objection to the proposed construction or alteration.

[Doc. No. 9256, 34 FR 5718, Mar. 27, 1969, as amended by Amdt. 169-1, 37 FR 21322, Oct. 7, 1972]

§ 169.5 FAA determination.

(a) The Administrator issues a recommendation and certification if he finds that the airport or facility is reasonably necessary for use in air commerce or in the interests of national defense; that it conforms to all applicable plans and policies for, and allocations of, airspace; and that it otherwise complies with requirements of Federal law properly considered by the Administrator. The Administrator may grant the recommendation and certification subject to conditions that ensure conformity of the airport or facility with these standards.

(b) A recommendation and certification under this part, express or implied, does not extend to a modified version of an airport or facility to which it applies, or to an additional area or facility at the same airport.

(c) If the application is denied the Administrator notifies the applicant of the grounds for the denial. The Administrator may revoke a recommendation and certification for proper cause.

(d) The authority of the Administrator under this part is exercised by Regional Directors as to airports or facilities within their respective regions.

[Doc. No. 9253, 34 FR 5718, Mar. 27, 1969, as amended by Amdt. 169-1, 37 FR 21322, Oct. 7, 1972]

SUBCHAPTER J—NAVIGATIONAL FACILITIES

PART 171—NON-FEDERAL NAVIGATION FACILITIES

Subpart A—VOR Facilities

Sec.
171.1 Scope.
171.3 Requests for IFR procedure.
171.5 Minimum requirements for approval.
171.7 Performance requirements.
171.9 Installation requirements.
171.11 Maintenance and operations requirements.
171.13 Reports.

Subpart B—Nondirectional Radio Beacon Facilities

171.21 Scope.
171.23 Requests for IFR procedure.
171.25 Minimum requirements for approval.
171.27 Performance requirements.
171.29 Installation requirements.
171.31 Maintenance and operations requirements.
171.33 Reports.

Subpart C—Instrument Landing System (ILS) Facilities

171.41 Scope.
171.43 Requests for IFR procedure.
171.45 Minimum requirements for approval.
171.47 Performance requirements.
171.49 Installation requirements.
171.51 Maintenance and operations requirements.
171.53 Reports.

Subpart D—True Lights

171.61 Air navigation certificate: Revocation and termination.

Subpart E—General

171.71 Materials incorporated by reference.
171.73 Alternative forms of reports.
171.75 Submission of requests.

Subpart F—Simplified Directional Facility (SDF)

171.101 Scope.
171.103 Requests for IFR procedure.
171.105 Minimum requirements for approval.
171.107 Definition.
171.109 Performance requirements.
171.111 Ground standards and tolerances.
171.113 Installation requirements.
Sec.
171.115 Maintenance and operations requirements.
171.117 Reports.

Subpart G—Distance Measuring Equipment (DME)

171.151 Scope.
171.153 Requests for IFR procedure.
171.155 Minimum requirements for approval.
171.157 Performance requirements.
171.159 Installation requirements.
171.161 Maintenance and operations requirements.
171.163 Reports.

Subpart H—VHF Marker Beacons

171.201 Scope.
171.203 Requests for IFR procedure.
171.205 Minimum requirements for approval.
171.207 Performance requirements.
171.209 Installation requirements.
171.211 Maintenance and operations requirements.
171.213 Reports.

Subpart I—Interim Standard Microwave Landing System (ISMLS)

171.251 Scope.
171.253 Definitions.
171.255 Requests for IFR procedures.
171.257 Minimum requirements for approval.
171.259 Performance requirements: General.
171.261 Localizer performance requirements.
171.263 Localizer automatic monitor system.
171.265 Glide path performance requirements.
171.267 Glide path automatic monitor system.
171.269 Marker beacon performance requirements.
171.271 Installation requirements.
171.273 Maintenance and operations requirements.
171.275 Reports.

Subpart J—Microwave Landing System (MLS)

171.301 Scope.
171.303 Definitions.
171.305 Requests for IFR procedure.
171.307 Minimum requirements for approval.
171.309 General requirements.
171.311 Signal format requirements.

Sec.
171.313 Azimuth performance requirements.
171.315 Azimuth monitor system requirements.
171.317 Approach elevation performance requirements.
171.319 Approach elevation monitor system requirements.
171.321 DME and marker beacon performance requirements.
171.323 Fabrication and installation requirements.
171.325 Maintenance and operations requirements.
171.327 Operational records.

AUTHORITY: 49 U.S.C. 1343, 1348, 1354(a), 1421, and 1426; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983).

SOURCE: Docket No. 5034, 29 FR 11337, Aug. 6, 1964, unless otherwise noted.

Subpart A—VOR Facilities

§ 171.1 Scope.

This subpart sets forth minimum requirements for the approval and operation on non-Federal VOR facilities that are to be involved in the approval of instrument flight rules and air traffic control procedures related to those facilities.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-2, 31 FR 5408, Apr. 6, 1966; Amdt. 171-7, 35 FR 12711, Aug. 11, 1970]

§ 171.3 Requests for IFR procedure.

(a) Each person who requests an IFR procedure based on a VOR facility that he owns must submit the following information with that request:

(1) A description of the facility and evidence that the equipment meets the performance requirements of § 171.7 and is installed in accordance with § 171.9.

(2) A proposed procedure for operating the facility.

(3) A proposed maintenance organization and maintenance manual that meets the requirements of § 171.11.

(4) A statement of intention to meet the requirements of this subpart.

(5) A showing that the facility has an acceptable level of operational reliability and an acceptable standard of performance. Previous equivalent operational experience with a facility with identical design and operational characteristics will be considered in showing compliance with this paragraph.

(b) After the FAA inspects and evaluates the facility, it advises the owner of the results and of any required changes in the facility or the maintenance manual or maintenance organization. The owner must then correct the deficiencies, if any, and operate the facility for an in-service evaluation by the FAA.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-7, 35 FR 12711, Aug. 11, 1970]

§ 171.5 Minimum requirements for approval.

(a) The following are the minimum requirements that must be met before the FAA will approve an IFR procedure for a non-Federal VOR:

(1) The facility's performance, as determined by air and ground inspection, must meet the requirements of § 171.7.

(2) The installation of the equipment must meet the requirements of § 171.9.

(3) The owner must agree to operate and maintain the facility in accordance with § 171.11.

(4) The owner must agree to furnish periodic reports, as set forth in § 171.13, and must agree to allow the FAA to inspect the facility and its operation whenever necessary.

(5) The owner must assure the FAA that he will not withdraw the facility from service without the permission of the FAA.

(6) The owner must bear all costs of meeting the requirements of this section and of any flight or ground inspections made before the facility is commissioned, except that the Federal Aviation Administration may bear certain of these costs subject to budgetary limitations and policy established by the Administrator.

(b) If the applicant for approval meets the requirements of paragraph (a) of this section, the FAA commissions the facility as a prerequisite to its approval for use in an IFR procedure. The approval is withdrawn at any time the facility does not continue to meet those requirements.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-6, 35 FR 10288, June 24, 1970]

§ 171.7 Performance requirements.

(a) The VOR must perform in accordance with the "International Standards and Recommended Practices, Aeronautical Telecommunications," Part I, paragraph 3.3 (Annex 10 to the Convention on International Civil Aviation), except that part of paragraph 3.3.2.1 specifying a radio frequency tolerance of 0.005 percent, and that part of paragraph 3.3.7 requiring removal of only the bearing information. In place thereof, the frequency tolerance of the radio frequency carrier must not exceed plus or minus 0.002 percent, and all radiation must be removed during the specified deviations from established conditions and during periods of monitor failure.

(b) Ground inspection consists of an examination of the design features of the equipment to determine that there will not be conditions that will allow unsafe operations because of component failure or deterioration.

(c) The monitor is checked periodically, during the in-service test evaluation period, for calibration and stability. The tests are made with a standard "Reference and variable phase signal generator" and associated test equipment, including an oscilloscope and portable field detector. In general, the ground check is conducted in accordance with section 8.4 of FAA Handbook AF P 6790.9 "Maintenance Instruction for VHF Omniranges", adapted for the facility concerned.

(d) Flight tests to determine the facility's adequacy for operational requirements and compliance with applicable "Standards and Recommended Practices" are conducted in accordance with the "U.S. Standard Flight Inspection Manual", particularly section 201.

(e) After January 1, 1975, the owner of the VOR shall modify the facility to perform in accordance with paragraph 3.3.5.7 of Annex 10 to the Convention on International Civil Aviation within 180 days after receipt of notice from the Administrator that 50 kHz channel spacing is to be implemented in the area and that a requirement exists for suppression of 9960 Hz subcarrier harmonics.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-7, 35 FR 12711, Aug. 11, 1970; Amdt. 171-9, 38 FR 28557, Oct. 15, 1973]

§ 171.9 Installation requirements.

(a) The facility must be installed according to accepted good engineering practices, applicable electric and safety codes, and the installation must meet at least the Federal Communication Commission's licensing requirements.

(b) The facility must have a reliable source of suitable primary power, either from a power distribution system or locally generated, with a supplemental standby system, if needed.

(c) Dual transmitting equipment with automatic changeover is preferred and may be required to support certain IFR procedures.

(d) There must be a means for determining, from the ground, the performance of the equipment, including the antenna, initially and periodically.

(e) A facility intended for use as an instrument approach aid for an airport must have or be supplemented by (depending on circumstances) the following ground-air or landline communications services:

(1) At facilities outside of and not immediately adjacent to air traffic control areas, there must be ground-air communications from the airport served by the facility. Separate communications channels are acceptable.

(2) At facilities within or immediately adjacent to air traffic control areas, there must be the ground-air communications required by paragraph (e)(1) of this section and reliable communications (at least a landline telephone) from the airport to the nearest FAA air traffic control or communication facility.

Paragraphs (e) (1) and (2) of this section are not mandatory at airports where an adjacent FAA facility can communicate with aircraft on the ground at the airport and during the entire proposed instrument approach procedure. In addition at low traffic density airports within or immediately adjacent to air traffic control areas, and where extensive delays are not a factor, the requirements of paragraphs (e) (1) and (2) of this section may be reduced to reliable communications (at least a landline telephone) from the airport to the nearest FAA air traffic control or communication facility, if an adjacent FAA facility can communicate with aircraft during the proposed instrument approach procedure, at least down to the minimum en route altitude of the controlled area.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-7, 35 FR 12711, Aug. 11, 1970]

§ 171.11 Maintenance and operations requirements.

(a) The owner of the facility must establish an adequate maintenance system and provide qualified maintenance personnel to maintain the facility at the level attained at the time it was commissioned. Each person who maintains a facility must meet at least the Federal Communications Commission's licensing requirements and show that he has the special knowledge and skills needed to maintain the facility including proficiency in maintenance procedures and the use of specialized test equipment.

(b) The owner must prepare, and obtain FAA approval of, an operations and maintenance manual that sets forth mandatory procedures for operations, preventive maintenance, and emergency maintenance, including instructions on each of the following:

(1) Physical security of the facility.

(2) Maintenance and operations by authorized persons only.

(3) FCC licensing requirements for operating and maintenance personnel.

(4) Posting of licenses and signs.

(5) Relations between the facility and FAA air traffic control facilities, with a description of the boundaries of controlled airspace over or near the facility, instructions for relaying air traffic control instructions and information (if applicable), and instructions for the operation of an air traffic advisory service if the VOR is located outside of controlled airspace.

(6) Notice to the Administrator of any suspension of service.

(7) Detailed and specific maintenance procedures and servicing guides stating the frequency of servicing.

(8) Air-ground communications, if provided, expressly written or incorporating appropriate sections of FAA manuals by reference.

(9) Keeping of station logs and other technical reports, and the submission of reports required by § 171.13.

(10) Monitoring of the facility.

(11) Inspections by United States personnel.

(12) Names, addresses, and telephone numbers of persons to be notified in an emergency.

(13) Shutdowns for routine maintenance and issue of "Notices to Airmen" for routine or emergency shutdowns (private use facilities may omit the "Notices to Airmen").

(14) An explanation of the kinds of activity (such as construction or grading) in the vicinity of the facility that may require shutdown or recertification of the facility by FAA flight check.

(15) Procedures for conducting a ground check of course accuracy.

(16) Commissioning of the facility.

(17) An acceptable procedure for amending or revising the manual.

(18) The following information concerning the facility:

(i) Location by latitude and longitude to the nearest second, and its position with respect to airport layouts.

(ii) The type, make, and model of the basic radio equipment that will provide the service.

(iii) The station power emission and frequency.

(iv) The hours of operation.

(v) Station identification call letters and method of station identification, whether by Morse code or recorded voice announcement, and the time spacing of the identification.

(vi) A description of the critical parts that may not be changed, adjusted, or repaired without an FAA flight check to confirm published operations.

(c) The owner shall make a ground check of course accuracy each month in accordance with procedures approved by the FAA at the time of commissioning, and shall report the results of the checks as provided in § 171.13.

(d) If the owner desires to modify the facility, he must submit the proposal to the FAA and may not allow any modifications to be made without specific approval.

(e) The owner's maintenance personnel must participate in initial inspections made by the FAA. In the case of subsequent inspections, the owner or his representative shall participate.

(f) Whenever it is required by the FAA, the owner shall incorporate improvements in VOR maintenance brought about by progress in the state of the art. In addition, he shall provide a stock of spare parts, including vacuum tubes, of such a quantity to make possible the prompt replacement of components that fail or deteriorate in service.

(g) The owner shall provide all approved test instruments needed for maintenance of the facility.

(h) The owner shall close the facility upon receiving two successive pilot reports of its malfunctioning.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-2, 31 FR 5408, Apr. 6, 1966]

§ 171.13 Reports.

The owner of each facility to which this subpart applies shall make the following reports on forms furnished by the FAA, at the times indicated, to the FAA Regional office for the area in which the facility is located:

(a) *Record of meter readings and adjustments* (*Form FAA-198*). To be filled out by the owner with the equipment adjustments and meter readings as of the time of commissioning, with one copy to be kept in the permanent records of the facility and two copies to the appropriate Regional office of the FAA. The owner shall revise the form after any major repair, modernization, or returning, to reflect an accurate record of facility operation and adjustment.

(b) *Facility maintenance log* (*FAA Form 6003-1*). This form is a permanent record of all equipment malfunctioning met in maintaining the facility, including information on the kind of work and adjustments made, equipment failures, causes (if determined), and corrective action taken. The owner shall keep the original of each report at the facility and send a copy to the appropriate Regional office of the FAA at the end of the month in which it is prepared.

(c) *Radio equipment operation record* (*Form FAA-418*). To contain a complete record of meter readings, recorded on each scheduled visit to the facility. The owner shall keep the original of each month's record at the facility and send a copy of it to the appropriate Regional office of the FAA.

(d) [Reserved]

(e) *VOR ground check error data* (*Forms FAA-2396 and 2397*). To contain results of the monthly course accuracy ground check in accordance with FAA Handbook AF P 6790.9 "Maintenance Instructions for VHF Omniranges". The owner shall keep the originals in the facility and send a copy of each form to the appropriate Regional office of the FAA on a monthly basis.

(49 U.S.C. 1348)

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-5, 34 FR 15245, Sept. 30, 1969; Amdt. 171-10, 40 FR 36110, Aug. 19, 1975]

Subpart B—Nondirectional Radio Beacon Facilities

§ 171.21 Scope.

(a) This subpart sets forth minimum requirements for the approval and operation of non-Federal, nondirectional radio beacon facilities that are to be involved in the approval of instrument flight rules and air traffic control procedures related to those facilities.

(b) A nondirectional radio beacon ("H" facilities domestically—NDB facilities internationally) radiates a continuous carrier of approximately equal intensity at all azimuths. The carrier is modulated at 1020 cycles per second for station identification purposes.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-2, 31 FR 5408, Apr. 6, 1966; Amdt. 171-7, 35 FR 12711, Aug. 11, 1970]

§ 171.23 Requests for IFR procedure.

(a) Each person who requests an IFR procedure based on a nondirectional radio beacon facility that he owns must submit the following information with that request:

(1) A description of the facility and evidence that the equipment meets the performance requirements of § 171.27 and is installed in accordance with § 171.29.

(2) A proposed procedure for operating the facility.

(3) A proposed maintenance arrangement and a maintenance manual that meets the requirements of § 171.31.

(4) A statement of intention to meet the requirements of this subpart.

(5) A showing that the facility has an acceptable level of operational reliability and an acceptable standard of performance. Previous equivalent operational experience with a facility with identical design and operational characteristics will be considered in showing compliance with this subparagraph.

(b) After the FAA inspects and evaluates the facility, it advises the owner of the results and of any required changes in the facility or the maintenance manual or maintenance organization. The owner must then correct the deficiencies, if any, and operate the facility for an in-service evaluation by the FAA.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-7, 35 FR 12711, Aug. 11, 1970]

§ 171.25 Minimum requirements for approval.

(a) The following are the minimum requirements that must be met before the FAA will approve an IFR procedure for a non-Federal, nondirectional radio beacon facility under this subpart:

(1) The facility's performances, as determined by air and ground inspection, must meet the requirements of § 171.27.

(2) The installation of the equipment must meet the requirements of § 171.29.

(3) The owner must agree to operate and maintain the facility in accordance with § 171.31.

(4) The owner must agree to furnish periodic reports, as set forth in § 171.33, and agree to allow the FAA to inspect the facility and its operation whenever necessary.

(5) The owner must assure the FAA that he will not withdraw the facility from service without the permission of the FAA.

(6) The owner must bear all costs of meeting the requirements of this section and of any flight or ground inspections made before the facility is commissioned, except that the Federal Aviation Administration may bear certain of these costs subject to budgetary limitations and policy established by the Administrator.

(b) If the applicant for approval meets the requirements of paragraph (a) of this section, the FAA commissions the facility as a prerequisite to its approval for use in an IFR procedure. The approval is withdrawn at any time the facility does not continue to meet those requirements. In addition, the facility may be de-commissioned whenever the frequency channel is needed for higher priority common system service.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-6, 35 FR 10288, June 24, 1970]

§ 171.27 Performance requirements.

(a) The facility must meet the performance requirements set forth in the "International Standards and Recommended Practices, Aeronautical Telecommunications, Part I, paragraph 3.4" (Annex 10 to the Convention on International Civil Aviation), except that identification by on-off keying of a second carrier frequency, separated from the main carrier by 1020 Hz plus or minus 50 Hz, is also acceptable.

(b) The facility must perform in accordance with recognized and accepted good electronic engineering practices for the desired service.

(c) Ground inspection consists of an examination of the design features of the equipment to determine (based on recognized and accepted good engineering practices) that there will not be conditions that will allow unsafe operations because of component failure or deterioration.

(d) Flight tests to determine the facility's adequacy for operational requirements and compliance with applicable "Standards and Recommended

Practices" are conducted in accordance with the "U.S. Standard Flight Inspection Manual", particularly section 207. The original test is made by the FAA and later tests shall be made under arrangements, satisfactory to the FAA, that are made by the owner.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-7, 35 FR 12711, Aug. 11, 1970]

§ 171.29 Installation requirements.

(a) The facility must be installed according to accepted good engineering practices, applicable electric and safety codes, and FCC licensing requirements.

(b) The facility must have a reliable source of suitable primary power.

(c) Dual transmitting equipment may be required to support some IFR procedures.

(d) A facility intended for use as an instrument approach aid for an airport must have or be supplemented by (depending on the circumstances) the following ground-air or landline communications services:

(1) At facilities outside of and not immediately adjacent to air traffic control areas, there must be ground-air communications from the airport served by the facility. Voice on the aid controlled from the airport is acceptable.

(2) At facilities within or immediately adjacent to air traffic control areas, there must be the ground-air communications required by paragraph (d)(1) of this section and reliable communications (at least a landline telephone) from the airport to the nearest FAA air traffic control or communication facility. Paragraphs (d) (1) and (2) of this section are not mandatory at airports where an adjacent FAA facility can communicate with aircraft on the ground at the airport and during the entire proposed instrument approach procedure. In addition, at low traffic density airports within or immediately adjacent to air traffic control areas, and where extensive delays are not a factor, the requirements of paragraphs (d) (1) and (2) of this section may be reduced to reliable communications (at least a landline telephone) from the airport to the nearest FAA air traffic control or communications facility, if an adjacent FAA facility can communicate with aircraft during the proposed instrument approach procedure, at least down to the minimum en route altitude of the controlled area.

§ 171.31 Maintenance and operations requirements.

(a) The owner of the facility must establish an adequate maintenance system and provide qualified maintenance personnel to maintain the facility at the level attained at the time it was commissioned. Each person who maintains a facility must meet at least the Federal Communications Commission's licensing requirements and show that he has the special knowledge and skills needed to maintain the facility including proficiency in maintenance procedures and the use of specialized test equipment.

(b) The owner must prepare, and obtain approval of, an operations and maintenance manual that sets forth mandatory procedures for operations, preventive maintenance, and emergency maintenance, including instructions on each of the following:

(1) Physical security of the facility.

(2) Maintenance and operations by authorized persons only.

(3) FCC licensing requirements for operating and maintenance personnel.

(4) Posting of licenses and signs.

(5) Relations between the facility and FAA air traffic control facilities, with a description of the boundaries of controlled airspace over or near the facility, instructions for relaying air traffic control instructions and information (if applicable), and instructions for the operation of an air traffic advisory service if the facility is located outside of controlled airspace.

(6) Notice to the Administrator of any suspension of service.

(7) Detailed arrangements for maintenance flight inspection and servicing stating the frequency of servicing.

(8) Air-ground communications, if provided, expressly written or incorporating appropriate sections of FAA manuals by reference.

(9) Keeping of station logs and other technical reports, and the submission of reports required by § 171.33.

(10) Monitoring of the facility, at least once each half hour, to assure continuous operation.

(11) Inspections by United States personnel.

(12) Names, addresses, and telephone numbers of persons to be notified in an emergency.

(13) Shutdowns for routine maintenance and issue of "Notices to Airmen" for routine or emergency shutdowns (private use facilities may omit the "Notices to Airmen").

(14) Commissioning of the facility.

(15) An acceptable procedure for amending or revising the manual.

(16) The following information concerning the facility:

(i) Location by latitude and longitude to the nearest second, and its position with respect to airport layouts.

(ii) The type, make, and model of the basic radio equipment that will provide the service.

(iii) The station power emission and frequency.

(iv) The hours of operation.

(v) Station identification call letters and method of station identification, whether by Morse code or recorded voice announcement, and the time spacing of the identification.

(c) If the owner desires to modify the facility, he must submit the proposal to the FAA and meet applicable requirements of the FCC.

(d) The owner's maintenance personnel must participate in initial inspections made by the FAA. In the case of subsequent inspections, the owner or his representative shall participate.

(e) The owner shall provide a stock of spare parts, including vacuum tubes, of such a quantity to make possible the prompt replacement of components that fail or deteriorate in service.

(f) The owner shall close the facility upon receiving two successive pilot reports of its malfunctioning.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-2, 31 FR 5408, Apr. 6, 1966]

§ 171.33 Reports.

The owner of each facility to which this subpart applies shall make the following reports, at the times indicated, to the FAA Regional office for the area in which the facility is located:

(a) *Record of meter readings and adjustments (Form FAA-198).* To be filled out by the owner or his maintenance representative with the equipment adjustments and meter readings as of the time of commissioning, with one copy to be kept in the permanent records of the facility and two copies to the appropriate Regional Office of the FAA. The owner shall revise the form after any major repair, modernization, or returning, to reflect an accurate record of facility operation and adjustment.

(b) *Facility maintenance log (FAA Form 6030-1).* This form is a permanent record of all equipment malfunctioning met in maintaining the facility, including information on the kind of work and adjustments made, equipment failures, causes (if determined), and corrective action taken. The owner shall keep the original of each report at the facility and send a copy to the appropriate Regional Office of the FAA at the end of the month in which it is prepared.

(c) *Radio equipment operation record (Form FAA-418).* To contain a complete record of meter readings, recorded on each scheduled visit to the facility. The owner shall keep the original of each month's record at the facility and send a copy of it to the appropriate Regional Office of the FAA.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-10, 40 FR 36110, Aug. 19, 1975]

Subpart C—Instrument Landing System (ILS) Facilities

§ 171.41 Scope.

This subpart sets forth minimum requirements for the approval and operation of non-Federal Instrument Landing System (ILS) Facilities that are to be involved in the approval of instrument flight rules and air traffic control procedures related to those facilities.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-2, 31 FR 5408, Apr. 6, 1966; Amdt. 171-7, 35 FR 12711, Aug. 11, 1970]

§ 171.43 Requests for IFR procedure.

(a) Each person who requests an IFR procedure based on an ILS facility that he owns must submit the following information with that request:

(1) A description of the facility and evidence that the equipment meets the performance requirements of § 171.47 and is installed in accordance with § 171.49.

(2) A proposed procedure for operating the facility.

(3) A proposed maintenance organization and a maintenance manual that meets the requirements of § 171.51.

(4) A statement of intent to meet the requirements of this subpart.

(5) A showing that the facility has an acceptable level of operational reliability and an acceptable standard of performance. Previous equivalent operational experience with a facility with identical design and operational characteristics will be considered in showing compliance with this subparagraph.

(b) After the FAA inspects and evaluates the facility, it advises the owner of the results and of any required changes in the facility or the maintenance manual or maintenance organization. The owner must then correct the deficiencies, if any, and operate the facility for an in-service evaluation by the FAA.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-7, 35 FR 12711, Aug. 11, 1970]

§ 171.45 Minimum requirements for approval.

(a) The following are the minimum requirements that must be met before the FAA will approve an IFR procedure for a non-Federal Instrument Landing System:

(1) The facility's performance, as determined by air and ground inspection, must meet the requirements of § 171.47.

(2) The installation of the equipment must meet the requirements of § 171.49.

(3) The owner must agree to operate and maintain the facility in accordance with § 171.51.

(4) The owner must agree to furnish periodic reports, as set forth in § 171.53 and agree to allow the FAA to inspect the facility and its operation whenever necessary.

(5) The owner must assure the FAA that he will not withdraw the facility from service without the permission of the FAA.

(6) The owner must bear all costs of meeting the requirements of this section and of any flight or ground inspections made before the facility is commissioned, except that the Federal Aviation Administration may bear certain of these costs subject to budgetary limitations and policy established by the Administrator.

(b) If the applicant for approval meets the requirements of paragraph (a) of this section, the FAA commissions the facility as a prerequisite to its approval for use in an IFR procedure. The approval is withdrawn at any time the facility does not continue to meet those requirements. In addition, the facility may be de-commissioned whenever the frequency channel is needed for higher priority common system service.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-6, 35 FR 10288, June 24, 1970]

§ 171.47 Performance requirements.

(a) The Instrument Landing System must perform in accordance with the "International Standards and Recommended Practices, Aeronautical Telecommunications, Part I, Paragraph 3.1" (Annex 10 to the Convention on International Civil Aviation) except as follows:

(1) The first part of paragraph 3.1.3, relating to suppression of radiation wholly or in part in any or all directions outside the 20-degree sector centered on the course line to reduce localizer does not apply.

(2) Radiation patterns must conform to limits specified in 3.1.3.3 and 3.1.3.4, but this does not mean that suppression of radiation to the rear of the antenna array to satisfy difficult siting positions (as per 3.1.3.1.4) is not allowed. For example, if a reflector screen for the antenna array is required to overcome a siting problem, the area to the rear of the localizer may be made unusable and should be so advertised.

(3) A third marker beacon (inner marker) is not required.

(4) The frequency tolerance of the radio frequency carrier must not exceed plus or minus 0.002 percent.

(b) Ground inspection consists of an examination of the design features of the equipment to determine that there will not be conditions that will allow unsafe operations because of component failure or deterioration.

(c) The monitor is checked periodically, during the in-service test evaluation period, for calibration and stability. These tests, and ground checks of glide slope and localizer radiation characteristics, are conducted in accordance with FAA Handbooks AF P 6750.1 and AF P 6750.2 "Maintenance Instructions for ILS Localizer Equipment" and "Maintenance Instructions for ILS Glide Slope Equipment".

(d) Flight tests to determine the facility's adequacy for operational requirements and compliance with applicable "Standards and Recommended Practices" are conducted in accordance with the "U.S. Standard Flight Inspection Manual", particularly section 217.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1974, as amended by Amdt. 171-9, 38 FR 28557, Oct. 15, 1973]

§ 171.49 Installation requirements.

(a) The facility must be of a permanent nature, located, constructed, and installed according to ICAO Standards (Annex 10), accepted good engineering practices, applicable electric and safety codes, and FCC licensing requirements.

(b) The facility must have a reliable source of suitable primary power, either from a power distribution system or locally generated. A determination by the Administrator as to whether a facility will be required to have stand-by power for the localizer, glide slope and monitor accessories to supplement the primary power, will be made for each airport based upon operational minimums and density of air traffic.

(c) A determination by the Administrator as to whether a facility will be required to have dual transmitting equipment with automatic changeover for localizer and glide slope components, will be made for each airport based upon operational minimums and density of air traffic.

(d) There must be a means for determining, from the ground, the performance of the equipment (including antennae), initially and periodically.

(e) The facility must have, or be supplemented by (depending on the circumstances) the following ground-air or landline communications services:

(1) At facilities outside of and not immediately adjacent to air traffic control zones or areas, there must be ground-air communications from the airport served by the facility. The utilization of voice on the ILS frequency should be determined by the facility operator on an individual basis.

(2) At facilities within or immediately adjacent to air traffic control zones or areas, there must be the ground-air communications required by paragraph (e)(1) of this section and reliable communications (at least a landline telephone) from the airport to the nearest FAA air traffic control or communication facility.

Paragraphs (e) (1) and (2) of this section are not mandatory at airports where an adjacent FAA facility can communicate with aircraft on the ground at the airport and during the entire proposed instrument approach procedure. In addition, at low traffic density airports within or immediately adjacent to air traffic control zones or areas, and where extensive delays are not a factor, the requirements of paragraphs (e) (1) and (2) of this section may be reduced to reliable communications (at least a landline telephone) from the airport to the nearest FAA air traffic control or communications facility, if an adjacent FAA facility can communicate with aircraft during the proposed instrument approach procedure down to the airport surface or at least to the minimum approach altitude.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-6, 35 FR 10288, June 24, 1970]

§ 171.51 Maintenance and operations requirements.

(a) The owner of the facility must establish an adequate maintenance system and provide qualified maintenance personnel to maintain the facility at the level attained at the time it was commissioned. Each person who maintains a facility must meet at least the Federal Communications Commission's licensing requirements and show that he has the special knowledge and skills needed to maintain the facility including proficiency in maintenance procedures and the use of specialized test equipment.

(b) The owner must prepare, and obtain approval of, an operations and maintenance manual that sets forth mandatory procedures for operations, preventive maintenance, and emergency maintenance, including instructions on each of the following:

(1) Physical security of the facility.

(2) Maintenance and operations by authorized persons only.

(3) FCC licensing requirements for operating and maintenance personnel.

(4) Posting of licenses and signs.

(5) Relation between the facility and FAA air traffic control facilities, with a description of the boundaries of controlled airspace over or near the facility, instructions for relaying air traffic control instructions and information (if applicable), and instructions for the operations of an air traffic advisory service if the facility is located outside of controlled airspace.

(6) Notice to the Administrator of any suspension of service.

(7) Detailed and specific maintenance procedures and servicing guides stating the frequency of servicing.

(8) Air-ground communications, if provided, expressly written or incorporating appropriate sections of FAA manuals by reference.

(9) Keeping of station logs and other technical reports, and the submission of reports required by § 171.53.

(10) Monitoring of the facility.

(11) Inspections by United States personnel.

(12) Names, addresses, and telephone numbers of persons to be notified in an emergency.

(13) Shutdowns for routine maintenance and issue of "Notices to Airmen" for routine or emergency shutdowns (private use facilities may omit the "Notices to Airmen").

(14) Commissioning of the facility.

(15) An acceptable procedure for amending or revising the manual.

(16) An explanation of the kinds of activities (such as construction or grading) in the vicinity of the facility that may require shutdown or recertification of the facility by FAA flight check.

(17) Procedures for conducting a ground check or localizer course alignment width, and clearance, and glide slope elevation angle and width.

(18) The following information concerning the facility:

(i) Facility component locations with respect to airport layout, instrument runway, and similar areas.

(ii) The type, make, and model of the basic radio equipment that will provide the service.

(iii) The station power emission and frequencies of the localizer, glide slope, markers, and associated compass locators, if any.

(iv) The hours of operation.

(v) Station identification call letters and method of station identification and the time spacing of the identification.

(vi) A description of the critical parts that may not be changed, adjusted, or repaired without an FAA flight check to confirm published operations.

(c) The owner shall make a ground check of the facility each month in accordance with procedures approved by the FAA at the time of commissioning, and shall report the results of the checks as provided in § 171.53.

(d) If the owner desires to modify the facility, he must submit the proposal to the FAA and may not allow any modifications to be made without specific approval.

(e) "The owner's maintenance personnel must participate in initial inspections made by the FAA. In the case of subsequent inspections, the owner or his representative shall participate."

(f) Whenever it is required by the FAA, the owner shall incorporate improvements in ILS maintenance brought about by progress in the state of the art. In addition, he shall provide a stock of spare parts, including vacuum tubes, of such a quantity to make possible the prompt replacement of components that fail or deteriorate in service.

(g) The owner shall provide FAA approved test instruments needed for maintenance of the facility.

(h) The owner shall close the facility upon receiving two successive pilot reports of its malfunctioning.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-2, 31 FR 5408, Apr. 6, 1966]

§ 171.53 Reports.

The owner of each facility to which this subpart applies shall make the following reports, at the times indicated, to the FAA Regional Office for the area in which the facility is located:

(a) *Record of meter readings and adjustments (Form FAA-198).* To be filled out by the owner or his maintenance representative with the equipment adjustments and meter readings as of the time of commissioning, with one copy to be kept in the permanent records of the facility and two copies to the appropriate Regional Office of the FAA. The owner shall revise the form after any major repair, modernization, or retuning, to reflect an accurate record of facility operation and adjustment.

(b) *Facility maintenance log (Form FAA 6030-1).* This form is a permanent record of all equipment malfunctioning met in maintaining the facility, including information on the kind of work and adjustments made, equipment failures, causes (if determined), and corrective action taken. The owner shall keep the original of each report at the facility and send a copy to the appropriate Regional Office of the FAA at the end of each month in which it is prepared.

(c) *Radio equipment operation record (Form FAA-418).* To contain a complete record of meter readings, recorded on each scheduled visit to the facility. The owner shall keep the original of each month's record at the facility and send a copy of it to the appropriate Regional Office of the FAA.

[Doc. No. 5034, 29 FR 11337, Aug. 6, 1964, as amended by Amdt. 171-5, 34 FR 15245, Sept. 30, 1969; Amdt. 171-10, 40 FR 36110, Aug. 19, 1975]

Subpart D—True Lights

§ 171.61 Air navigation certificate: Revocation and termination.

(a) Except as provided in paragraph (b) of this section, each air navigation certificate of "Lawful Authority to Operate a True Light" is hereby revoked, and each application therefor is hereby terminated.

(b) Paragraph (a) of this section does not apply to—

(1) A certificate issued to a Federal-Aid Airport Program sponsor who was required to apply for that certificate under regulations then in effect, and who has not surrendered that certificate under § 151.86(e) of this chapter; or

(2) An application made by a Federal-Aid Airport Program sponsor who was required to make that application under regulations then in effect, and who has not terminated that application under § 151.86(e) of this chapter.

(49 U.S.C. 1101-1120; sec. 307, 72 Stat. 749, 49 U.S.C. 1348)

[Amdt. 171-4, 33 FR 12545, Sept. 5, 1968]

Subpart E—General

§ 171.71 Materials incorporated by reference.

Copies of standards, recommended practices and documents incorporated by reference in this part are available for the use of interested persons at any FAA Regional Office and FAA Headquarters. An historical file of these materials is maintained at Headquarters, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20590.

[Amdt. 171-8, 36 FR 5584, Mar. 25, 1971]

§ 171.73 Alternative forms of reports.

On a case-by-case basis, a Regional Director may accept any report in a format other than the FAA form required by this part if he is satisfied that the report contains all the information required on the FAA form and can be processed by FAA as conveniently as the FAA form.

(49 U.S.C. 1348)

[Amdt. 171-5, 34 FR 15245, Sept. 30, 1969]

§ 171.75 Submission of requests.

(a) Requests for approval of facilities not having design and operational characteristics identical to those of facilities currently approved under this part, including requests for deviations from this part for such facilities, must be submitted to the Director, Systems Research and Development Service.

(b) The following requests must be submitted to the Regional Director of the region in which the facility is located:

(1) Requests for approval of facilities that have design and operational characteristics identical to those of facilities currently approved under this part, including requests for deviations from this part for such facilities.

(2) Requests for deviations from this part for facilities currently approved under this part.

(3) Requests for modification of facilities currently approved under this part.

[Amdt. 171-7, 35 FR 12711, Aug. 11, 1970]

Subpart F—Simplified Directional Facility (SDF)

SOURCE: Docket No. 10116, 35 FR 12711, Aug. 11, 1970, unless otherwise noted.

§ 171.101 Scope.

This subpart sets forth minimum requirements for the approval and operation of non-Federal Simplified Directional Facilities (SDF) that are to be involved in the approval of instrument flight rules and air traffic control procedures related to those facilities.

§ 171.103 Requests for IFR procedure.

(a) Each person who requests an IFR procedure based on an SDF that he owns must submit the following information with that request:

(1) A description of the facility and evidence that the equipment meets the performance requirements of § 171.109 and the standards and tolerances of § 171.111, and is installed in accordance with § 171.113.

(2) A proposed procedure for operating the facility.

(3) A proposed maintenance organization and a maintenance manual that meets the requirements of § 171.115.

(4) A statement of intent to meet the requirements of this subpart.

(5) A showing that the facility has an acceptable level of operational reliability as prescribed in § 171.111(k), and an acceptable standard of performance. Previous equivalent operational experience with a facility with identical design and operational characteristics will be considered in showing compliance with this paragraph.

(b) After the Federal Aviation Administration inspects and evaluates the facility, it advises the owner of the results and of any required changes in the facility or the maintenance manual or maintenance organization. The owner must then correct the deficiencies, if any, and operate the facility for an in-service evaluation by the Federal Aviation Administration.

§ 171.105 Minimum requirements for approval.

(a) The following are the minimum requirements that must be met before the Federal Aviation Administration will approve an IFR procedure for a non-Federal Simplified Directional Facility:

(1) A suitable frequency channel must be available.

(2) The facility's performance, as determined by air and ground inspection, must meet the requirements of §§ 171.109 and 171.111.

(3) The installation of the equipment must meet the requirements of § 171.113.

(4) The owner must agree to operate and maintain the facility in accordance with § 171.115.

(5) The owner must agree to furnish periodic reports as set forth in § 171.117, and agree to allow the FAA to inspect the facility and its operation whenever necessary.

(6) The owner must assure the FAA that he will not withdraw the facility from service without the permission of the FAA.

(7) The owner must bear all costs of meeting the requirements of this section and of any flight or ground inspections made before the facility is commissioned, except that the FAA may bear certain of these costs subject

to budgetary limitations and policy established by the Administrator.

(b) If the applicant for approval meets the requirements of paragraph (a) of this section, the FAA commissions the facility as a prerequisite to its approval for use in an IFR procedure. The approval is withdrawn at any time the facility does not continue to meet those requirements. In addition, the facility is licensed by the Federal Communications Commission. The Federal Aviation Administration recommends cancellation or nonrenewal of the Federal Communications Commission license whenever the frequency channel is needed for higher priority common system service.

§ 171.107 Definition.

As used in this subpart:

"SDF" (simplified directional facility) means a directional aid facility providing only lateral guidance (front or back course) for approach from a final approach fix.

"DDM" (difference in depth of modulation) means the percentage modulation depth of the larger signal minus the percentage modulation depth of the smaller signal, divided by 100.

"Angular displacement sensitivity" means the ratio of measured DDM to the corresponding angular displacement from the appropriate reference line.

"Back course sector" means the course sector on the opposite end of the runway from the front course sector.

"Course line" means the locus of points along the final approach course at which the DDM is zero.

"Course sector" means a sector in a horizontal plane containing the course line and limited by the loci of points nearest to the course line at which the DDM is 0.155.

"Displacement sensitivity" means the ratio of measured DDM to the corresponding lateral displacement from the appropriate reference line.

"Front course sector" means the course sector centered on the course line in the direction from the runway in which a normal final approach is made.

"Half course sector" means the sector in a horizontal plane containing the course line and limited by the loci of points nearest to the course line, at which the DDM is 0.0775.

"Point A" means a point on the front course in the approach direction a distance of 4 nautical miles from the threshold.

"Point A1" means a point on the front course in the approach direction a distance of 1 statute mile from the threshold.

"Point A2" means a point on the front course at the threshold.

"Reference datum" means a point at a specified height located vertically above the intersection of the course and the threshold.

"Missed approach point" means the point on the final approach course, not farther from the final approach fix than Point "A2", at which the approach must be abandoned, if the approach and subsequent landing cannot be safely completed by visual reference, whether or not the aircraft has descended to the minimum descent altitude.

§ 171.109 Performance requirements.

(a) The Simplified Directional Facility must perform in accordance with the following standards and practices:

(1) The radiation from the SDF antenna system must produce a composite field pattern which is amplitude modulated by a 90 Hz and a 150 Hz tone. The radiation field pattern must produce a course sector with the 90 Hz tone predominating on one side of the course and with the 150 Hz tone predominating on the opposite side.

(2) When an observer faces the SDF from the approach end of runway, the depth of modulation of the radiofrequency carrier due to the 150 Hz tone must predominate on his right hand and that due to the 90 Hz tone must predominate on his left hand.

(3) All horizontal angles employed in specifying the SDF field patterns must originate from the center of the antenna system which provides the signals used in the front course sector.

(4) The SDF must operate on odd tenths or odd tenths plus a twentieth MHz within the frequency band 108.1

MHz to 111.95 MHz. The frequency tolerance of the radio frequency carrier must not exceed plus or minus 0.002 percent.

(5) The radiated emission from the SDF must be horizontally polarized. The vertically polarized component of the radiation on the course line must not exceed that which corresponds to an error one-twentieth of the course sector width when an aircraft is positioned on the course line and is in a roll attitude of 20° from the horizontal.

(6) The SDF must provide signals sufficient to allow satisfactory operation of a typical aircraft installation within the sector which extends from the center of the SDF antenna system to distances of 18 nautical miles within a plus or minus 10° sector and 10 nautical miles within the remainder of the coverage when alternative navigational facilities provide satisfactory coverage within the intermediate approach area. SDF signals must be receivable at the distances specified at and above a height of 1,000 feet above the elevation of the threshold, or the lowest altitude authorized for transition, whichever is higher. Such signals must be receivable, to the distances specified, up to a surface extending outward from the SDF antenna and inclined at 7° above the horizontal.

(7) The modulation tones must be phase-locked so that within the half course sector, the demodulated 90 Hz and 150 Hz wave forms pass through zero in the same direction within 20° of phase relative to the 150 Hz component, every half cycle of the combined 90 Hz and 150 Hz wave form. However, the phase need not be measured within the half course sector.

(8) The angle of convergence of the final approach course and the extended runway centerline must not exceed 30°. The final approach course must be aligned to intersect the extended runway centerline between points A1 and the runway threshold. When an operational advantage can be achieved, a final approach course that does not intersect the runway or that intersects it at a distance greater than point A1 from the threshold, may be established, if that course lies within 500 feet laterally of the extended runway centerline at a point 3,000 feet outward from the runway threshold. The mean course line must be maintained within ±10 percent of the course sector width.

(9) The nominal displacement sensitivity within the half course sector must be 50 microamperes/degree. The nominal course sector width must be 6°. When an operational advantage can be achieved, a nominal displacement sensitivity of 25 microamperes/degree may be established, with a nominal course sector width of 12° with proportional displacement sensitivity. The lateral displacement sensitivity must be adjusted and maintained within the limits of plus or minus 17 percent of the nominal value.

(10) The off-course (clearance) signal must increase at a substantially linear rate with respect to the angular displacement from the course line up to an angle on either side of the course line where 175 microamperes of deflection is obtained. From that angle to ±10°, the off-course deflection must not be less than 175 microamperes. From ±10° to ±35° the off-course deflection must not be less than 150 microamperes. With the course adjusted to cause any of several monitor alarm conditions, the aforementioned values of 175 microamperes in the sector 10° each side of course and 150 microamperes in the sector ±10° to ±35° may be reduced to 160 microamperes and 135 microamperes, respectively. These conditions must be met at a distance of 18 nautical miles from the SDF antenna within the sector 10° each side of course line and 10 nautical miles from the SDF antenna within the sector ±10° to ±35° each side of course line.

(11) The SDF may provide a ground-to-air radiotelephone communication channel to be operated simultaneously with the navigation and identification signals, if that operation does not interfere with the basic function. If a channel is provided, it must conform with the following standards:

(i) The channel must be on the same radiofrequency carrier or carriers as used for the SDF function, and the radiation must be horizontally polarized. Where two carriers are modulated with speech, the relative phases of the modulations on the two carriers must avoid the occurence of nulls within the coverage of the SDF.

(ii) On centerline, the peak modulation depth of the carrier or carriers due to the radiotelephone communications must not exceed 50 percent but must be adjusted so that the ratio of peak modulation depth due to the radiotelephone communications to that due to the identification signal is approximately 9:1.

(iii) The audiofrequency characteristics of the radiotelephone channel must be flat to within 3 db relative to the level at 1,000 Hz over the range from 300 Hz to 3,000 Hz.

(12) (i) The SDF must provide for the simultaneous transmission of an identification signal, specific to the runway and approach direction, on the same radiofrequency carrier or carriers as used for the SDF function. The transmission of the identification signal must not interfere in any way with the basic SDF function.

(ii) The identification signal must be produced by Class A2 modulation of the radiofrequency carrier or carriers using a modulation tone of 1020 Hz within ±50 Hz. The depth of modulation must be between the limits of 5 and 15 percent except that, where a radiotelephone communication channel is provided, the depth of modulation must be adjusted so that the ratio of peak modulation depth due to radiotelephone communications to that due to the identification signal modulation is approximately 9:1. The emissions carrying the identification signal must be horizontally polarized.

(iii) The identification signal must employ the International Morse Code and consist of three letters.

(iv) The identification signal must be transmitted at a speed corresponding to approximately seven words per minute, and must be repeated at approximately equal intervals, not less than six times per minute. When SDF transmission is not available for operational use, including periods of removal of navigational components or during maintenance or test transmissions, the identification signal must be suppressed.

(b) It must be shown during ground inspection of the design features of the equipment that there will not be conditions that will allow unsafe operations because of component failure or deterioration.

(c) The monitor must be checked periodically during the in-service test evaluation period for calibration and stability. These tests, and ground checks of SDF radiation characteristics must be conducted in accordance with the maintenance manual required by § 171.115(c) and must meet the standards and tolerances contained in § 171.111(j).

(d) The monitor system must provide a warning to the designated control point(s) when any of the conditions of § 171.111(j) occur, within the time periods specified in that paragraph.

(e) Flight inspection to determine the adequacy of the facility's operational performance and compliance with applicable performance requirements must be conducted in accordance with the "U.S. Standard Flight Inspection Manual." Tolerances contained in the U.S. Standard Flight Inspection Manual, section 217, must be complied with except as stated in paragraph (f) of this section.

(f) Flight inspection tolerances specified in section 217 of the "U.S. Standard Flight Inspection Manual" must be complied with except as follows:

(1) *Course sector width.* The nominal course sector width must be 6°. When an operational advantage can be achieved, a nominal course sector width of 12° may be established. Course sector width must be adjusted and maintained within the limits of ±17 percent of the nominal value.

(2) *Course alignment.* The mean course line must be adjusted and maintained within the limits of ±10 percent of the nominal course sector width.

(3) *Course structure.* Course deviations due to roughness, scalloping, or bends must be within the following limitations:

(i) *Front course.* (*a*) Course structure from 18 miles from runway threshold to Point A must not exceed ±40 microamperes;

(*b*) Point A to Point A-1—linear decrease from not more than ±40 microamperes at Point A to not more than ±20 microamperes at Point A-1;

(*c*) Point A-1 to Missed Approach Point—not more than ±20 microamperes;

(*d*) Monitor tolerances: width ±17 percent of nominal; alignment—±10 percent of nominal course sector width.

(ii) *Back course.* (*a*) Course structure 18 miles from runway threshold to 4 miles from runway threshold must not exceed ±40 microamperes. Four miles to 1 mile from R/W must not exceed ±40 microamperes decreasing to not more than ±20 microamperes, at a linear rate.

(*b*) Monitor tolerances: width—±17 percent of nominal; alignment—±10 percent of nominal course sector width.

[Doc. No. 10116, 35 FR 12711, Aug. 11, 1970, as amended by Amdt. 171-9, 38 FR 28557, Oct. 15, 1973]

§ 171.111 Ground standards and tolerances.

Compliance with this section must be shown as a condition to approval and must be maintained during operation of the SDF.

(a) *Frequency.* (1) The SDF must operate on odd tenths or odd tenths plus a twentieth MHz within the frequency band 108.1 MHz to 111.95 MHz. The frequency tolerance of the radio frequency carrier must not exceed plus or minus 0.002 percent.

(2) The modulating tones must be 90 Hz and 150 Hz within ±2.5 percent.

(3) The identification signal must be 1020 Hz within ±50 Hz.

(4) The total harmonic content of the 90 Hz tone must not exceed 10 percent.

(5) The total harmonic content of the 150 Hz tone must not exceed 10 percent.

(b) *Power output.* The normal carrier power output must be of a value which will provide coverage requirements of § 171.109(a)(6) when reduced by 3 dB to the monitor RF power reduction alarm point specified in § 171.111(j)(3).

(c) *VSWR.* (1) The VSWR of carrier and sideband feedlines must be a nominal value of 1/1 and must not exceed 1.2/1.

(2) The sponsor will also provide additional manufacturer's ground standards and tolerances for all VSWR parameters peculiar to the equipment which can effect performance of the facility in meeting the requirements specified in §§ 171.109 and 171.111.

(d) *Insulation resistance.* The insulation resistance of all coaxial feedlines must be greater than 20 megohms.

(e) *Depth of modulation.* (1) The depth of modulation of the radio frequency carrier due to each of the 90 Hz and 150 Hz tones must be 20 percent ±2 percent along the course line.

(2) The depth of modulation of the radiofrequency carrier due to the 1020 Hz identification signal must be within 5 percent to 15 percent.

(f) *Course sector width.* The standard course sector width must be 6° or 12°. The course sector must be maintained with ±17 percent of the standard.

(g) *Course alignment.* Course alignment must be as specified in § 171.109(a)(8).

(h) *Back course alignment and width.* If a back course is provided, standards and tolerances for back course sector width and alignment must be the same as course sector width and course alignment specified in paragraphs (f) and (g) of this section.

(i) *Clearance.* Clearance must be as specified in § 171.109(a)(10).

(j) *Monitor standards and tolerances.* (1) The monitor system must provide a warning to the designated control point(s) when any of the conditions described in this paragraph occur, within the time periods specified in paragraph (j)(6) of this section.

(2) Course shift alarm: The monitor must alarm and cause radiation to cease, or identification and navigation signals must be removed, if the course alignment deviates from standard alignment by 10 percent or more of the standard course sector width.

(3) RF power reduction alarm: The monitor must alarm and cause radiation to cease, or identification and navigation signals must be removed, if the output power is reduced by 3 db or more from normal.

(4) Modulation level alarm: The monitor must alarm and cause radi-

ation to cease, or identification and navigation signals must be removed, if the 90 Hz and 150 Hz modulation levels decrease by 17 percent or more.

(5) Course sector width alarm: The monitor must alarm and cause radiation to cease, or identification and navigation signals must be removed, for a change in course sector width to a value differing by ±17 percent or more from the standard

(6) Monitor delay before shutdown: Radiation must cease, or identification and navigation signals must be removed, within 10 seconds after a fault is detected by the monitor, and no attempt must be made to resume radiation for a period of at least 20 seconds. If an automatic recycle device is used, not more than three successive recycles may be permitted before a complete SDF shutdown occurs.

(k) *Mean time between failures.* The mean time between failures must not be less than 800 hours. This measure is applied only to equipment failures (monitor or transmitting equipment, including out of tolerance conditions) which result in facility shutdown. It does not relate to the responsiveness of the maintenance organization.

(l) *Course alignment stability.* Drift of the course alignment must not exceed one-half the monitor limit in a 1-week period.

[Doc. No. 10116, 35 FR 12711, Aug. 11, 1970, as amended by Amdt. 171-9, 38 FR 28558, Oct. 15, 1973]

§ 171.113 Installation requirements.

(a) The facility must be installed according to accepted good engineering practices, applicable electric and safety codes, and FCC requirements.

(b) The SDF facility must have the following basic components:

(1) VHF SDF equipment and associated monitor system;

(2) Remote control, and indicator equipment (remote monitor) when required by the FAA;

(3) A final approach fix; and

(4) Compass locator (COMLO) or marker if suitable fixes and initial approach routes are not available from existing facilities.

(c) The facility must have a reliable source of suitable primary power, either from a power distribution system or locally generated. Also, adequate power capacity must be provided for operation of test and working equipment at the SDF. A determination by the Federal Aviation Administration as to whether a facility will be required to have standby power for the SDF and monitor accessories to supplement the primary power will be made for each airport based upon operational minimums and density of air traffic.

(d) A determination by the Federal Aviation Administration as to whether a facility will be required to have dual transmitting equipment with automatic changeover for the SDF will be made for each airport based upon operational minimums and density of air traffic.

(e) There must be a means for determining, from the ground, the performance of the equipment (including antennae), initially and periodically.

(f) The facility must have the following ground/air or landline communication services:

(1) At facilities outside of and not immediately adjacent to air traffic control zones or areas, there must be ground/air communications from the airport served by the facility. The utilization of voice on the SDF should be determined by the facility operator on an individual basis.

(2) At facilities within or immediately adjacent to air traffic control zones or areas, there must be the ground/air communications required by paragraph (b)(1) of this section and reliable communications (at least a landline telephone) from the airport to the nearest Federal Aviation Administration air traffic control or communications facility.

Compliance with paragraphs (f) (1) and (2) of this section need not be shown at airports where an adjacent Federal Aviation Administration facility can communicate with aircraft on the ground at the airport and during the entire proposed instrument approach procedure. In addition, at low traffic density airports within or immediately adjacent to air traffic control zones or areas, and where extensive delays are not a factor, the requirements of paragraphs (f) (1) and

(2) of this section may be reduced to reliable communications (at least a landline telephone) from the airport to the nearest Federal Aviation Administration air traffic control or communication facility, if an adjacent Federal Aviation Administration facility can communicate with aircraft during the proposed instrument approach procedure down to the airport surface or at least to the minimum approach altitude.

(g) At those locations where two separate SDF facilities serve opposite ends of a single runway, an interlock must insure that only the facility serving the approach direction in use can radiate, except where no operationally harmful interference results.

(h) At those locations where, in order to alleviate frequency congestion, the SDF facilities serving opposite ends of one runway employ identical frequencies, an interlock must insure that the facility not in operational use cannot radiate.

(i) Provisions for maintenance and operations by authorized persons only.

(j) Where an operational advantage exists, the installation may omit a back course.

§ 171.115 Maintenance and operations requirements.

(a) The owner of the facility shall establish an adequate maintenance system and provide qualified maintenance personnel to maintain the facility at the level attained at the time it was commissioned. Each person who maintains a facility shall meet at a minimum the Federal Communications Commission's licensing requirements and show that he has the special knowledge and skills needed to maintain the facility, including proficiency in maintenance procedures and the use of specialized test equipment.

(b) The SDF must be designed and maintained so that the probability of operation within the performance requirements specified is high enough to insure an adequate level of safety. In the event out-of-tolerance conditions develop, the facility shall be removed from operation, and the designated control point notified.

(c) The owner must prepare, and obtain approval of, and each person operating or maintaining the facility shall comply with, an operations and maintenance manual that sets forth procedures for operations, preventive maintenance, and emergency maintenance, including instructions on each of the following:

(1) Physical security of the facility. This includes provisions for designating critical areas relative to the facility and preventing or controlling movements within the facility that may adversely affect SDF operations.

(2) Maintenance and operations by authorized persons only.

(3) Federal Communications Commission requirements for operating personnel and maintenance personnel.

(4) Posting of licenses and signs.

(5) Relation between the facility and Federal Aviation Administration air traffic control facilities, with a description of the boundaries of controlled airspace over or near the facility, instructions for relaying air traffic control instructions and information (if applicable), and instructions for the operation of an air traffic advisory service if the facility is located outside of controlled airspace.

(6) Notice to the Administrator of any suspension of service.

(7) Detailed and specific maintenance procedures and servicing guides stating the frequency of servicing.

(8) Air-ground communications, if provided, expressly written or incorporating appropriate sections of Federal Aviation Administration manuals by reference.

(9) Keeping of station logs and other technical reports, and the submission of reports required by § 171.117.

(10) Monitoring of the facility.

(11) Names, addresses, and telephone numbers of persons to be notified in an emergency.

(12) Inspection by U.S. personnel.

(13) Shutdowns for routine maintenance and issue of "Notices to Airmen" for routine or emergency shutdowns, except that private use facilities may omit "Notices to Airmen."

(14) Commissioning of the facility.

(15) An acceptable procedure for amending or revising the manual.

(16) An explanation of the kinds of activities (such as construction or grading) in the vicinity of the facility

that may require shutdown or certification of the facility by Federal Aviation Administration flight check.

(17) Procedure for conducting a ground check of SDF course alignment, width and clearance.

(18) The following information concerning the facility:

(i) Facility component locations with respect to airport layout, instrument runway, and similar areas;

(ii) The type, make, and model of the basic radio equipment that will provide the service;

(iii) The station power emission and frequencies of the SDF, markers and associated COMLOs, if any;

(iv) The hours of operation;

(v) Station identification call letters and method of station identification and the time spacing of the identification;

(vi) A description of the critical parts that may not be changed, adjusted, or repaired without a Federal Aviation Administration flight check to confirm published operations.

(d) The owner shall make a ground check of the facility each month in accordance with procedures approved by the Federal Aviation Administration at the time of commissioning, and shall report the results of the checks as provided in § 171.117.

(e) If the owner desires to modify the facility, he shall submit the proposal to the Federal Aviation Administration and may not allow any modifications to be made without specific approval.

(f) The owner's maintenance personnel shall participate in initial inspections made by the Federal Aviation Administration. In the case of subsequent inspections, the owner or his representatives shall participate.

(g) Whenever it is required by the Federal Aviation Administration, the owner shall incorporate improvements in SDF maintenance. In addition, he shall provide a stock of spare parts, of such a quantity, to make possible the prompt replacement of components that fail or deteriorate in service.

(h) The owner shall provide Federal Aviation Administration approved test instruments needed for maintenance of the facility.

(i) The owner shall close the facility by ceasing radiation and shall issue a "Notice to Airmen" that the facility is out of service (except that private use facilities may omit "Notices to Airmen"), upon receiving two successive pilot reports of its malfunctioning.

§ 171.117 Reports.

The owner of each facility to which this subpart applies shall make the following reports, at the time indicated, to the Federal Aviation Administration Regional Office for the area in which the facility is located:

(a) Record of meter readings and adjustments (Form FAA-198). To be filled out by the owner or his maintenance representative with the equipment adjustments and meter readings as of the time of commissioning, with one copy to be kept in the permanent records of the facility and two copies to the appropriate Regional Office of the Federal Aviation Administration. The owner shall revise the form after any major repair, modification, or retuning, to reflect an accurate record of facility operation and adjustment.

(b) Facility maintenance log (FAA Form 6030-1) This form is a permanent record of all equipment malfunctioning met in maintaining the facility, including information on the kind of work and adjustments made, equipment failures, causes (if determined), and corrective action taken. The owner shall keep the original of each report at the facility and send a copy to the appropriate Regional Office of the Federal Aviation Administration at the end of each month in which it is prepared.

(c) Radio equipment operation record (Form FAA-418), containing a complete record of meter readings, recorded on each scheduled visit to the facility. The owner shall keep the original of each month's record at the facility and send a copy of it to the appropriate Regional Office of the Federal Aviation Administration.

[Doc. No. 10116, 35 FR 12711, Aug. 11, 1970, as amended by Amdt. 171-10, 40 FR 36110, Aug. 19, 1975]

Subpart G—Distance Measuring Equipment (DME)

SOURCE: Docket No. 10116, 35 FR 12715, Aug. 11, 1970, unless otherwise noted.

§ 171.151 Scope.

This subpart sets forth minimum requirements for the approval and operation of non-Federal DME facilities that are to be involved in the approval of instrument flight rules and air traffic control procedures related to those facilities.

§ 171.153 Requests for IFR procedure.

(a) Each person who requests an IFR procedure based on a DME facility that he owns must submit the following information with that request:

(1) A description of the facility and evidence that the equipment meets the performance requirements of § 171.157 and is installed in accordance with § 171.159.

(2) A proposed procedure for operating the facility.

(3) A proposed maintenance organization and maintenance manual that meets the requirement of § 171.161.

(4) A statement of intention to meet the requirements of this subpart.

(5) A showing that the facility has an acceptable level of operational reliability and an acceptable standard of performance. Previous equivalent operational experience with a facility with identical design and operational characteristics will be considered in showing compliance with this paragraph.

(b) After the Federal Aviation Administration inspects and evaluates the facility, it advises the owner of the results and of any required changes in the facility or the maintenance manual or maintenance organization. The owner must then correct the deficiencies, if any, and operate the facility for an in-service evaluation by the Federal Aviation Administration.

§ 171.155 Minimum requirements for approval.

(a) The following are the minimum requirements that must be met before the Federal Aviation Administration will approve an IFR procedure for a non-Federal DME:

(1) A suitable frequency channel must be available.

(2) The facility's performance, as determined by air and ground inspection, must meet the requirements of § 171.157.

(3) The installation of the equipment must meet the requirements of § 171.159.

(4) The owner must agree to operate and maintain the facility in accordance with § 171.161.

(5) The owner must agree to furnish periodic reports, as set forth in § 171.163, and must agree to allow the Federal Aviation Administration to inspect the facility and its operation whenever necessary.

(6) The owner must assure the Federal Aviation Administration that he will not withdraw the facility from service without the permission of the Federal Aviation Administration.

(7) The owner must bear all costs of meeting the requirements of this section and of any flight or ground inspections made before the facility is commissioned, except that the Federal Aviation Administration may bear certain of these costs subject to budgetary limitations and policy established by the Administrator.

(b) If the applicant for approval meets the requirements of paragraph (a) of this section, the Federal Aviation Administration commissions the facility as a prerequisite to its approval for use in an IFR procedure. The approval is withdrawn at any time the facility does not continue to meet those requirements.

§ 171.157 Performance requirements.

(a) The DME must meet the performance requirements set forth in the "International Standards and Recommended Practices, Aeronautical Telecommunications, Part I, Paragraph 3.5" (Annex 10 to the Convention of International Civil Aviation).

(b) It must be shown during ground inspection of the design features of the equipment that there will not be conditions that will allow unsafe operations because of component failure or deterioration.

(c) The monitor must be checked periodically, during the in-service test evaluation period, for calibration and stability. These tests and ground tests of the functional and performance characteristics of the DME transponder must be conducted in accordance with the maintenance manual required by § 171.161(b).

(d) Flight inspection to determine the adequacy of the facility's operational performance and compliance with applicable "Standards and Recommended Practices" must be accomplished in accordance with the "U.S. Standard Flight Inspection Manual."

[Docket No. 10116, 35 FR 12715, Aug. 11, 1970, as amended by Amdt. 171-13, 50 FR 4875, NOv. 27, 1985]

§ 171.159 Installation requirements.

(a) The facility must be installed according to accepted good engineering practices, applicable electric and safety codes, and Federal Communications Commission requirements.

(b) The facility must have a reliable source of suitable primary power, either from a power distribution system or locally generated, with a supplemental standby system, if needed.

(c) Dual transmitting equipment with automatic changeover is preferred and may be required to support certain IFR procedures.

(d) There must be a means for determining from the ground, the performance of the equipment, initially and periodically.

(e) A facility intended for use as an instrument approach aid for an airport must have or be supplemented by the following ground air or landline communications services:

(1) At facilities outside of and not immediately adjacent to air traffic control areas, there must be ground-air communications from the airport served by the facility. Separate communications channels are acceptable.

(2) At facilities within or immediately adjacent to air traffic control areas, there must be the ground-air communications required by paragraph (e)(1) of this section and reliable communications (at least a landline telephone) from the airport to the nearest Federal Aviation Administration air traffic control or communication facility. Separate communications channels are acceptable.

Compliance with paragraphs (e) (1) and (2) of this section need not be shown at airports where an adjacent Federal Aviation Administration facility can communicate with aircraft on the ground at the airport and during the entire proposed instrument approach procedure. In addition, at low traffic density airports within or immediately adjacent to air traffic control zones or areas, and where extensive delays are not a factor, the requirements of paragraphs (e) (1) and (2) of this section may be reduced to reliable communications (at least a landline telephone) from the airport to the nearest Federal Aviation Administration air traffic control or communications facility, if an adjacent Federal Aviation Administration facility can communicate with aircraft during the proposed instrument approach procedure, at least down to the minimum en route altitude for the controlled area.

§ 171.161 Maintenance and operations requirements.

(a) The owner of the facility shall establish an adequate maintenance system and provide qualified maintenance personnel to maintain the facility at the level attained at the time it was commissioned. Each person who maintains a facility shall meet at a minimum the Federal Communications Commission's licensing requirements and show that he has the special knowledge and skills needed to maintain the facility, including proficiency in maintenance procedures and the use of specialized test equipment.

(b) The owner must prepare and obtain Federal Aviation Administration approval of, and each person operating or maintaining the facility shall comply with, an operations and maintenance manual that sets forth procedures for operations, preventive maintenance, and emergency maintenance, including instructions on each of the following:

(1) Physical security of the facility.

(2) Maintenance and operations by authorized persons only.

(3) Federal Communications Commission's requirements and maintenance personnel.

(4) Posting of licenses and signs.

(5) Relations between the facility and Federal Aviation Administration air traffic control facilities, with a description of the boundaries of controlled airspace over or near the facility, instructions for relaying air traffic control instructions and information (if applicable), and instructions for the operation of an air traffic advisory service if the DME is located outside of controlled airspace.

(6) Notice to the Administrator of any suspension of service.

(7) Detailed and specific maintenance procedures and servicing guides stating the frequency of servicing.

(8) Air-ground communications, if provided, expressly written or incorporating appropriate sections of Federal Aviation Administration manuals by reference.

(9) Keeping of station logs and other technical reports, and the submission of reports required by § 171.163.

(10) Monitoring of the facility.

(11) Inspections by U.S. personnel.

(12) Names, addresses, and telephone numbers of persons to be notified in an emergency.

(13) Shutdowns for routine maintenance and issue of "Notices to Airmen" for routine or emergency shutdowns, except that private use facilities may omit the "Notices to Airmen."

(14) An explanation of the kinds of activity (such as construction or grading) in the vicinity of the facility that may require shutdown or reapproval of the facility by Federal Aviation Administration flight check.

(15) Commissioning of the facility.

(16) An acceptable procedure for amending or revising the manual.

(17) The following information concerning the facility:

(i) Location by latitude and longitude to the nearest second, and its position with respect to airport layouts.

(ii) The type, make, and model of the basic radio equipment that will provide the service.

(iii) The station power emission and frequency.

(iv) The hours of operation.

(v) Station identification call letters and methods of station identification, whether by Morse code or recorded voice announcement, and the time spacing of the identification.

(vi) A description of the critical parts that may not be changed, adjusted, or repaired without an FAA flight check to confirm published operations.

(c) The owner shall make a monthly ground operational check in accordance with procedures approved by the FAA at the time of commissioning, and shall report the results of the checks as provided in § 171.163.

(d) If the owner desires to modify the facility, he shall submit the proposal to the FAA and may not allow any modifications to be made without specific approval.

(e) The owner's maintenance personnel shall participate in initial inspections made by the FAA. In the case of subsequent inspections, the owner or his representative shall participate.

(f) Whenever it is required by the FAA, the owner shall incorporate improvements in DME maintenance.

(g) The owner shall provide a stock of spare parts of such a quantity to make possible the prompt replacement of components that fail or deteriorate in service.

(h) The owner shall provide FAA-approved test instruments needed for maintenance of the facility.

(i) The owner shall shut down the facility (i.e., cease radiation and issue a NOTAM that the facility is out-of-service) upon receiving two successive pilot reports of its malfunctioning.

§ 171.163 Reports.

The owner of each facility to which this subpart applies shall make the following reports on forms furnished by the FAA, at the time indicated, to the FAA Regional office for the area in which the facility is located:

(a) Record of meter readings and adjustments (Form FAA 198). To be filled out by the owner with the equipment adjustments and meter readings as of the time of commissioning, with one copy to be kept in the permanent records of the facility and two copies to the appropriate Regional office of the FAA. The owner shall revise the form after any major repair, modification, or returning, to reflect an accurate record of facility operation and adjustment.

(b) Facility maintenance log (FAA Form 6030-1). This form is a permanent record of all equipment malfunctioning met in maintaining the facility, including information on the kind of work and adjustments made, equipment failures, causes (if determined), and corrective action taken. The owner shall keep the original of each report at the facility and send a copy to the appropriate Regional Office of the Federal Aviation Administration at the end of the month in which it is prepared.

(c) Radio equipment operation record (Form FAA-418), containing a complete record of meter readings, recorded on each scheduled visit to the facility. The owner shall keep the original of each month's record at the facility and send a copy of it to the appropriate Regional Office of the Federal Aviation Administration.

[Doc. No. 10116, 35 FR 12715, Aug. 11, 1970, as amended by Amdt. 171-10, 40 FR 36110, Aug. 19, 1975]

Subpart H—VHF Marker Beacons

SOURCE: Docket No. 10116, 35 FR 12718, Aug. 11, 1970, unless otherwise noted.

§ 171.201 Scope.

(a) This subpart sets forth minimum requirements for the approval and operation of non-Federal VHF marker beacon facilities that are to be involved in the approval of instrument flight rules and air traffic control procedures related to those facilities.

§ 171.203 Requests for IFR procedure.

(a) Each person who requests an IFR procedure which will incorporate the use of a VHF marker beacon facility that he owns must submit the following information with that request:

(1) A description of the facility and evidence that the equipment meets the performance requirements of § 171.207 and is installed in accordance with § 171.209.

(2) A proposed procedure for operating the facility.

(3) A proposed maintenance organization and a maintenance manual that meets the requirements of § 171.211.

(4) A statement of intent to meet the requirement of this subpart.

(5) A showing that the facility has an acceptable level of operational reliability, and an acceptable standard of performance. Previous equivalent operational experience may be shown to comply with this subparagraph.

(b) After the Federal Aviation Administration inspects and evaluates the facility, it advises the owner of the results and of any required changes in the facility or the maintenance manual or maintenance organization. The owner shall then correct the deficiencies, if any, and operate the facility for an in-service evaluation by the Federal Aviation Administration.

§ 171.205 Minimum requirements for approval.

(a) The following are the minimum requirements that must be met before the Federal Aviation Administration will approve an IFR procedure which incorporates the use of a non-Federal VHF marker beacon facility under this subpart:

(1) The facility's performances, as determined by air and ground inspection, must meet the requirements of § 171.207.

(2) The installation of the equipment must meet the requirements of § 171.209.

(3) The owner must agree to operate and maintain the facility in accordance with § 171.211.

(4) The owner must agree to furnish periodic reports, as set forth in § 171.213, and agree to allow the Federal Aviation Administration to inspect the facility and its operation whenever necessary.

(5) The owner must assure the Federal Aviation Administration that he will not withdraw the facility from service without the permission of the Federal Aviation Administration.

(6) The owner must bear all costs of meeting the requirements of this section and of any flight or ground inspections made before the facility is commissioned, except that the Federal Aviation Administration may bear cer-

tain of these costs subject to budgetary limitations and policy established by the Administrator.

(b) If the applicant for approval meets the requirements of paragraph (a) of this section, the Federal Aviation Administration commissions the facility as a prerequisite to its approval for use in an IFR procedure. The approval is withdrawn at any time the facility does not continue to meet those requirements.

§ 171.207 Performance requirements.

(a) VHF Marker Beacons must meet the performance requirements set forth in the "International Standards and Recommended Practices, Aeronautical Telecommunications, Part I, paragraphs 3.1.6 and 3.6." (Annex 10 to the Convention on International Civil Aviation) except those portions that pertain to identification. Identification of a marker beacon (75 MHz) must be in accordance with "U.S. Standard Flight Inspection Manual," § 219.

(b) The facility must perform in accordance with recognized and accepted good electronic engineering practices for the desired service. The facility must be checked periodically during the in-service test evaluation period for calibration and stability. These tests and ground tests of the marker radiation characteristics must be conducted in accordance with the maintenance manual required by § 171.211(b).

(c) It must be shown during ground inspection of the design features of the equipment that there will not be conditions that will allow unsafe operations because of component failure or deterioration.

(d) Flight inspection to determine the adequacy of the facility's operational performance and compliance with applicable "Standards and Recommended Practices" are conducted in accordance with the "U.S. Standard Flight Inspection Manual." The original test is made by the Federal Aviation Administration and later tests must be made under arrangements, satisfactory to the Federal Aviation Administration, that are made by the owner.

§ 171.209 Installation requirements.

(a) The facility must be installed according to accepted good engineering practices, applicable electric and safety codes, and Federal Communications Commission requirements.

(b) The facility must have a reliable source of suitable primary power.

(c) Dual transmitting equipment may be required, if applicable, to support certain IFR procedures.

(d) At facilities within or immediately adjacent to air traffic control areas, and that are intended for use as instrument approach aids for an airport, there must be ground-air communications or reliable communications (at least a landline telephone) from the airport to the nearest Federal Aviation Administration air traffic control or communication facility. Compliance with this paragraph need not be shown at airports where an adjacent Federal Aviation Administration facility can communicate with aircraft on the ground at the airport and during the entire proposed instrument approach procedure. In addition, at low traffic density airports within or immediately adjacent to air traffic control zones or areas, and where extensive delays are not a factor, the requirements of this paragraph may be reduced to reliable communications (at least a landline telephone) from the airport to the nearest Federal Aviation Administration air traffic control or communications facility, if an adjacent Federal Aviation Administration facility can communicate with aircraft during the proposed instrument approach procedure, at least down to the minimum en route altitude for the controlled area.

§ 171.211 Maintenance and operations requirements.

(a) The owner of the facility shall establish an adequate maintenance system and provide qualified maintenance personnel to maintain the facility at the level attained at the time it was commissioned. Each person who maintains a facility shall meet at a minimum the Federal Communications Commission's licensing requirements and show that he has the special knowledge and skills needed to maintain the facility, including proficiency in maintenance procedures and the use of specialized test equipment.

(b) The owner must prepare, and obtain approval of, and each person who operates or maintains the facility shall comply with, an operations and maintenance manual that sets forth procedures for operations, preventive maintenance, and emergency maintenance, including instructions on each of the following:

(1) Physical security of the facility.

(2) Maintenance and operations by authorized persons only.

(3) Federal Communications Commission's requirements for operating and maintenance personnel.

(4) Posting of licenses and signs.

(5) Relations between the facility and Federal Aviation Administration air traffic control facilities, with a description of the boundaries of controlled airspace over or near the facility, instructions for relaying air traffic control instructions and information (if applicable).

(6) Notice to the Administrator of any suspension of service.

(7) Detailed arrangements for maintenance, flight inspection, and servicing, stating the frequency of servicing.

(8) Keeping of station logs and other technical reports, and the submission of reports required by § 171.213.

(9) Monitoring of the facility, at least once each half hour, to assure continuous operation.

(10) Inspections by U.S. personnel.

(11) Names, addresses, and telephone numbers of persons to be notified in an emergency.

(12) Shutdowns for routine maintenance and issue of "Notices to Airmen" for routine or emergency shutdowns (private use facilities may omit the "Notice to Airmen")

(13) Commissioning of the facility.

(14) An acceptable procedure for amending or revising the manual.

(15) The following information concerning the facility:

(i) Location by latitude and longitude to the nearest second, and its position with respect to airport layouts.

(ii) The type, make, and model of the basic radio equipment that will provide the service.

(iii) The station power emission and frequency.

(iv) The hours of operation.

(v) Station identification call letters and methods of station identification, whether by Morse Code or recorded voice announcement, and the time spacing of the identification.

(c) If the owner desires to modify the facility, he shall submit the proposal to the Federal Aviation Administration and meet applicable requirements of the Federal Communications Commission, and must not allow any modification to be made without specific approval by the Federal Aviation Administration.

(d) The owner's maintenance personnel shall participate in initial inspections made by the Federal Aviation Administration. In the case of subsequent inspections, the owner or his representative shall participate.

(e) The owner shall provide a stock of spare parts, of such a quantity to make possible the prompt replacement of components that fail or deteriorate in service.

(f) The owner shall shut down the facility by ceasing radiation, and shall issue a "Notice to Airmen" that the facility is out of service (except that private use facilities may omit "Notices to Airmen") upon receiving two successive pilot reports of its malfunctioning.

§ 171.213 Reports.

The owner of each facility to which this subpart applies shall make the following reports, at the times indicated, to the Federal Aviation Administration Regional Office for the area in which the facility is located:

(a) Record of meter readings and adjustments (Form FAA-198). To be filled out by the owner or his maintenance representative with the equipment adjustments and meter readings as of the time of commissioning, with one copy to be kept in the permanent records of the facility and two copies to the appropriate Regional Office of the Federal Aviation Administration. The owner must revise the form after any major repair, modification, or retuning, to reflect an accurate record of facility operation and adjustment.

(b) Facility maintenance log (FAA Form 6030-1). This form is a permanent record of all equipment malfunctioning met in maintaining the facility, including information on the kind of work and adjustments made, equipment failures, causes (if determined), and corrective action taken. The owner shall keep the original of each report at the facility and send a copy to the appropriate Regional Office of the Federal Aviation Administration at the end of the month in which it is prepared.

(c) Radio equipment operation record (Form FAA-418), containing a complete record of meter readings, recorded on each scheduled visit to the facility. The owner shall keep the original of each month's record at the facility and send a copy of it to the appropriate Regional Office of the Federal Aviation Administration.

[Doc. No. 10116, 35 FR 12716, Aug. 11, 1970, as amended by Amdt. 171-10, 40 FR 36110, Aug. 19, 1975]

Subpart I—Interim Standard Microwave Landing System (ISMLS)

SOURCE: Docket No. 14120, 40 FR 36110, Aug. 19, 1975, unless otherwise noted.

§ 171.251 Scope.

This subpart sets forth minimum requirements for the approval and operation of non-Federal Interim Standard Microwave Landing System (ISMLS) facilities that are to be involved in the approval of instrument flight rules and air traffic control procedures related to those facilities.

§ 171.253 Definitions.

As used in this subpart:

"Angular displacement sensitivity" (Glide Slope) means the ratio of measured DDM to the corresponding angular displacement from the appropriate reference line.

"Collocated ground station" means the type of ground station which transmits two or more guidance signals simultaneously from a common location.

"Course line" means the locus of points nearest to the runway centerline in any horizontal plane at which the DDM is zero.

"Course sector (full)" means a sector in a horizontal plane containing the course line and limited by the loci of points nearest to the course line at which the DDM is 0.155.

"Course sector (half)" means the sector in a horizontal plane containing the course line and limited by the loci of points nearest to the course line at which DDM is 0.0775.

"DDM" means difference in depth of modulation. The percentage modulation depth of the larger signal minus the percentage modulation depth of the smaller signal, divided by 100.

"Displacement sensitivity" (Localizer) means the ratio of measured DDM to the corresponding lateral displacement from the appropriate reference line.

"Facility Performance Category I—ISMLS" means an ISMLS which provides guidance information from the coverage limit of the ISMLS to the point at which the localizer course line intersects the ISMLS glide path at a height of 200 feet or less above the horizontal plane containing the threshold.

"Glide path" means that locus of points in the vertical plane containing the runway center line at which the DDM is zero, which, of all such loci, is the closest to the horizontal plane.

"Glide path angle" (θ) means the angle between a straight line which represents the mean of the ISMLS glide path and the horizontal.

"Glide path sector (full)" means the sector in the vertical plane containing the ISMLS glide path and limited by the loci of points nearest to the glide path at which the DDM is 0.175. The ISMLS glide path sector is located in the vertical plane containing the runway centerline, and is divided by the radiated glide path in two parts called upper sector and lower sector, referring respectively to the sectors above and below the glide path.

"Glide path sector (half)" means the sector in the vertical plane containing the ISMLS glide path and limited by the loci of points nearest to the glide path at which the DDM is 0.0875.

"ISMLS Point 'A'" means an imaginary point on the glide path/localizer course measured along the runway centerline extended, in the approach direction, four nautical miles from the runway threshold.

"ISMLS Point 'B'" means an imaginary point on the glide path/localizer course measured along the runway centerline extended, in the approach direction, 3500 feet from the runway threshold.

"ISMLS Point 'C'" means a point through which the downward extended straight portion of the glide path (at the commissioned angle) passes at a height of 100 feet above the horizontal plane containing the runway threshold.

"Interim standard microwave landing system" (ISMLS) means a ground station which transmits azimuth and elevation angle information which, when decoded and processed by the airborne unit, provides signal performance capable of supporting approach minima for V/STOL and CTOL operations and operates with the signal format and tolerances specified in §§ 171.259, 171.261, 171.263, 171.265, and 171.267.

"Integrity" means that quality which relates to the trust which can be placed in the correctness of the information supplied by the facility.

"Mean corrective time" means the average time required to correct an equipment failure over a given period, after a service man reaches the facility.

"Mean time between failures" means the average time between equipment failure over a given period.

"Reference datum" means a point at a specified height located vertically above the intersection of the runway centerline and the threshold and through which the downward extended straight portion of the ISMLS glide path passes.

"Split type ground station" means the type of ground station in which the electronic components for the azimuth and elevation guidance are contained in separate housings or shelters at different locations, with the azimuth portion of the ground station located at the stop end of the runway, and the elevation guidance near the approach end of the runway.

§ 171.255 Requests for IFR procedures.

(a) Each person who requests an IFR procedure based on an ISMLS facility that he owns must submit the following information with that request:

(1) A description of the facility and evidence that the equipment meets the performance requirements of §§ 171.259, 171.261, 171.263, 171.265, 171.267, and 171.269, and is installed in accordance with § 171.271.

(2) A proposed procedure for operating the facility.

(3) A proposed maintenance organization and a maintenance manual that meets the requirements of § 171.273.

(4) A statement of intent to meet the requirements of this subpart.

(5) A showing that the ISMLS facility has an acceptable level of operational reliability, maintainability and acceptable standard of performance. Previous equivalent operational experience with a facility with identical design and operational characteristics will be considered in showing compliance with this paragraph.

(b) After the FAA inspects and evaluates the ISMLS facility, it advises the owner of the results and of any required changes in the ISMLS facility or in the maintenance manual or maintenance organization. The owner must then correct the deficiencies, if any, and operate the ISMLS facility for an inservice evaluation by the FAA.

§ 171.257 Minimum requirements for approval.

(a) The following are the minimum requirements that must be met before the FAA approves an IFR procedure for a non-Federal ISMLS facility:

(1) The performance of the ISMLS facility, as determined by flight and ground inspection conducted by the FAA, must meet the requirements of §§ 171.259, 171.261, 171.263, 171.265, 171.267, and 171.269.

(2) The installation of the equipment must meet the requirements of § 171.271.

(3) The owner must agree to operate and maintain the ISMLS facility in accordance with § 171.273.

(4) The owner must agree to furnish periodic reports as set forth in § 171.275 and agree to allow the FAA to inspect the facility and its operation whenever necessary.

(5) The owner must assure the FAA that he will not withdraw the ISMLS facility from service without the permission of the FAA.

(6) The owner must bear all costs of meeting the requirements of this section and of any flight or ground inspection made before the ISMLS facility is commissioned, except that the FAA may bear certain costs subject to budgetary limitations and policy established by the Administrator.

(b) If the applicant for approval meets the requirements of paragraph (a) of this section, the FAA approves the ISMLS facility for use in an IFR procedure. The approval is withdrawn at any time that the ISMLS facility does not continue to meet those requirements. In addition, the ISMLS facility may be de-commissioned whenever the frequency channel is needed for higher priority common system service.

§ 171.259 Performance requirements: General.

(a) The ISMLS consists of the following basic components:

(1) C-Band (5000 MHz-5030 MHz) localizer equipment, associated monitor system, and remote indicator equipment;

(2) C-Band (5220 MHz-5250 MHz) glide path equipment, associated monitor system, and remote indicator equipment;

(3) VHF marker beacons (75 MHz), associated monitor systems, and remote indicator equipment.

(4) An ISMLS airborne receiver or a VHF/UHF ILS receiver modified to be capable of receiving the ISMLS signals. This modification requires the addition of a C-Band antenna, a converter unit, a microwave/ILS mode control, and a VHF/UHF receiver modification kit.

(b) The electronic ground equipments in paragraph (a)(1), (2), and (3) of this section, must be designed to operate on a nominal 120/240 volt, 60 Hz, 3-wire single phase AC power source.

(c) ISMLS ground equipment must meet the following service conditions:

(1) AC line parameters, DC voltage, elevation, and duty:

120 V nominal value, 102 V to 138 V (±1 V).*

208 V nominal value, 177 V to 239 V (±2 V).*

240 V nominal value, 204 V to 276 V (±0.2 V).*

AC line frequency (60 Hz), 57 Hz to 63 Hz (±0.2 Hz).*

DC voltage (48 V), 44 V to 52 V (±0.5 V).*

*NOTE: Where discrete values of the above frequency or voltages are specified for testing purposes, the tolerances given in parentheses indicated by an asterisk apply to the test instruments used to measure these parameters.

Elevation, 0 to 10,000 ft. above sea level.

Duty, continuous, unattended.

(2) Ambient conditions for localizer and glide path equipment:

Temperature, −10° C to +50° C.

Relative humidity, 5% to 90%.

(3) Ambient conditions for marker beacon facilities and all other equipment installed outdoors (for example, antennae, field detectors, and shelters):

Temperature, −50° C. to +70° C.

Relative humidity, 5% to 100%.

(4) All equipment installed outdoors must operate satisfactorily under the following conditions:

Wind velocity, 0-100 MPH (not including gusts).

Hail stones, ½" diameter.

Rain, provide coverage through a distance of 5 nautical miles with rain falling at a rate of 50 millimeters per hour, and with rain falling at the rate of 25 millimeters per hour for the additional design performance range of the system.

Ice loading, encased in ½" radial thickness of clear ice.

(d) The ISMLS must perform in accordance with the following standards and practices for Facility Performance Category I operation:

(1) The ISMLS must be constructed and adjusted so that, at a specified distance from the threshhold, similar instrumental indications in the aircraft represent similar displacements from the course line or ISMLS glide path, as appropriate, regardless of the particular ground installation in use.

(2) The localizer and glide path components listed in paragraphs (a)(1) and (a)(2) of this section which form part of an ISMLS, must comply at least with the standard performance requirements specified herein. The marker beacon components listed in paragraph (a)(3) of this section which form part of an ISMLS, must comply at least with the standard performance requirements specified in Subpart H of this part.

(3) The ISMLS must be so designed and maintained that the probability of operation is within the performance requirements specified in § 171.273(k).

(e) The signal format and pairing of the runway localizer and glide path transmitter frequencies of an ISMLS must be in accordance with the frequency plan approved by the FAA, and must meet the following signal format requirements:

(1) The localizer and glide slope stations must transmit angular guidance information on a C-band microwave carrier on narrow, scanned antenna beams that are encoded to produce a modulation in space which, after averaging over several beam scans, is equivalent to the modulation used for conventional ILS as specified in Subpart C of this part, except that the frequency tolerance may not exceed ±0.0001 percent.

(2) Guidance modulation must be impressed on the microwave carrier of the radiated signal in the form of a summation of 90 Hz and 150 Hz sinusoidal modulation corresponding to the pointing direction of the particular beam which radiates the signal.

(3) Each of the effective beam positions must be illuminated in a particular sequence for a short time interval. The modulation impressed on each beam must be a sample of the combined 90 Hz and 150 Hz waveform appropriate for that particular beam direction and time slot, and must be accomplished by appropriately varying the length of time the carrier is radiated during each beam illumination interval.

(4) For those cases where the scanning beam fills the coverage space in steps, the incremental step must not exceed 0.6 times the beam width where the beam is in the proportional guidance sector. In the clearance region, the step may not exceed 0.8 times the beam width.

(5) At least one pulse duration modulation (pdm) sample pulse per beam width of scan must be provided.

(6) The minimum pulse duration must be 40 microseconds.

(7) The minimum beam scan cycle must be 600 Hz.

(8) The minimum duty ratio detectable by a receiver located anywhere in the coverage areas defined by this specification may not be less than 0.1. Detected duty ratio means the ratio of the average energy per scan detected at a point in space to the average energy per scan transmitted in all directions through the transmitting antenna.

(9) The localizer must produce a C-band unmodulated reference frequency signal of sufficient strength to allow satisfactory operation of an aircraft receiver within the specified localizer and glide path coverage sectors. Pairing of this reference frequency with the localizer and glide slope frequencies must be in accordance with a frequency plan approved by the FAA.

§ 171.261 Localizer performance requirements.

This section prescribes the performance requirements for localizer equipment components of the ISMLS.

(a) The localizer antenna system must:

(1) Be located on the extension of the centerline of the runway at the stop end;

(2) Be adjusted so that the course line be on a vertical plane containing the centerline of the runway served;

(3) Have the minimum height necessary to comply with the coverage requirements prescribed in paragraph (j) of this section;

(4) Be located at a distance from the stop end of the runway that is consistent with safe obstruction clearance practices;

(5) Not obscure any light of the approach landing system; and

(6) Be installed on frangible mounts or beyond the 1000′ light bar.

(b) On runways where limited terrain prevents the localizer antennae from being positioned on the runway centerline extended, and the cost of the land fill or a tall tower antenna support is prohibitive, the localizer antenna array may be offset, including a collocated ground station, so that the course intercepts the centerline at a point determined by the amount of the angular offset and the glide path angle. If other than a runway centerline localizer is used, the criteria in Subpart C of Part 97 of this chapter is applicable.

(c) At locations where two separate ISMLS facilities serve opposite ends of of a single runway, an interlock must ensure that only the facility serving the approach direction being used will radiate.

(d) The radiation from the localizer antenna system must produce a composite field pattern which is pulse duration modulated, the time average equivalent to amplitude modulation by a 90 Hz and 150 Hz tone. The localizer station must transmit angular guidance information over a C-band microwave carrier on narrow, scanned antenna beams that are encoded to produce a modulation in space which, after averaging over several beam scans, is equivalent to the modulation used for conventional ILS as specified in Subpart C of this part. The radiation field pattern must produce a course sector with one tone predominating on one side of the course and with the other tone predominating on the opposite side. When an observer faces the localizer from the approach end of the runway, the depth of modulation of the radio frequency carrier due to the 150 Hz tone must predominate on his right hand and that due to the 90 Hz tone must predominate on his left hand.

(e) All horizontal angles employed in specifying the localizer field patterns must originate from the center of the localizer antenna system which provides the signals used in the front course sector.

(f) The ISMLS course sector angle must be adjustable between 3 degrees and 9 degrees. The applicable course sector angle will be established and approved on an individual basis.

(g) The ISMLS localizer must operate in the band 5000 MHz to 5030 MHz. The frequency tolerance may not exceed ±0.0001 percent.

(h) The emission from the localizer must be vertically polarized. The horizontally polarized component of the radiation of the course line may not exceed that which corresponds to a DDM error of 0.016 when an aircraft is positioned on the course line and is in a roll attitude of 20 degrees from the horizontal.

(i) The localizer must provide signals sufficient to allow satisfactory operation of a typical aircraft installation within the localizer and glide path coverage sectors. The localizer coverage sector must extend from the center of the localizer antenna system to distances of 18 nautical miles minimum within ±10 degrees from the front course line, and 10 nautical miles minimum between ±10 degrees and ±35 degrees from the front course line. The ISMLS localizer signals must be receivable at the distances specified up from a surface extending outward from the localizer antenna and within a sector in the elevation plane from 0.300 to 1.750 of the established glide path angle (θ).

(j) Except as provided in paragraph (k) of this section, in all parts of the coverage volume specified in paragraph (i) of this section, the peak field strength may not be less than -87 dBW/m^2, and must permit satisfactory operational usage of ISMLS localizer facilities.

(k) The minimum peak field strength on the ISMLS glide path and within the localizer course sector from a distance of 10 nautical miles to a height of 100 feet (30 meters) above the horizontal plane containing the threshold, may not be less than +87 dBW/m^2.

(l) Above 16 degrees, the ISMLS localizer signals must be reduced to as low a value as practicable.

(m) Bends in the course line may not have amplitudes which exceed the following:

Zone	Amplitude (DDM) (95 pct probability)
Outer limit of coverage to ISMLS point "A"	0.031

Zone	Amplitude (DDM) (95 pct probability)
ISMLS point "A" to ISMLS point "B"	0.031 at ISMLS point "A" decreasing at linear rate to 0.015 at ISMLS point "B".
ISMLS point "B" to ISMLS point "C".	0.015.

(n) The amplitudes referred to in paragraph (m) of this section are the DDMs due to bends as realized on the mean course line, when correctly adjusted.

(o) The radio frequency carrier must meet the following requirements:

(1) The nominal depth of modulation of the radio frequency carrier due to each of the 90 Hz and 150 Hz tones must be 20 percent along the course line.

(2) The depth of modulation of the radio frequency carrier due to each of the 90 Hz and 150 Hz tones must be between 18 and 22 percent.

(3) The frequency tolerance of the 90 Hz and 150 Hz modulated tones must be within ±25 percent.

(4) Total harmonic content of the 90 Hz tone may not exceed 10 percent.

(5) Total harmonic content of the 150 Hz tone may not exceed 10 percent. However, a 300 Hz tone may be transmitted for identification purposes.

(6) At every half cycle of the combined 90 Hz and 150 Hz wave form, the modulation tones must be phase-locked so that within the half course sector, the demodulated 90 Hz and 150 Hz wave forms pass through zero in the same direction within 20 degrees with phase relative to the 150 Hz component. However, the phase need not be measured within the half course sector.

(p) The mean course line must be adjusted and maintained within ±.015DDM from the runway centerline at the ISMLS reference datum.

(q) The nominal displacement sensitivity within the half course sector at the ISMLS reference datum, must be 0.00145 DDM/meter (0.00044DDM/foot). However, where the specified nominal displacement sensitivity cannot be met, the displacement sensitivity must be adjusted as near as possible to that value.

(r) The lateral displacement sensitivity must be adjusted and maintained within 17 percent of the nominal value. Nominal sector width at the ISMLS reference datum is 210 meters (700 feet).

(s) The increase of DDM must be substantially linear with respect to angular displacement from the front course line where DDM is zero, up to angle on either side of the front course line where the DDM is 0.180. From that angle to ±10 degrees, the DDM may not be less than 0.180. From ±10 degrees to ±35 degrees, the DDM may not be less than 0.155.

(t) The localizer must provide for the simultaneous transmission of an identification signal which meets the following:

(1) It must be specific to the runway and approach direction, on the same radio frequency carrier, as used for the localizer function.

(2) Transmission of the identification signal may not interfere in any way with the basic localizer function.

(3) The signal must be produced by pulse duration modulation of the radio frequency carrier resulting in a detected audio tone in the airborne VHF receiver of 1020 Hz ±50Hz.

(4) The depth of modulation must be between the limits of 10 and 12 percent.

(5) The emissions carrying the identification signal must be vertically polarized.

(6) The identification signal must employ the International Morse Code and consist of three letters. It must be preceded by the International Morse Code signal of the letter "M" followed by a short pause where it is necessary to distinguish the ISMLS facility from other navigational facilities in the immediate area. At airports where both an ISMLS and an ILS are in operation, each facility must have a different identification call sign.

(7) The signal must be transmitted at a speed corresponding to approximately seven words per minute, and must be repeated at approximately equal intervals, not less than six times per minute, during which time the localizer is available for operational use. When the localizer is not available for

transmission, the identification signal must be suppressed.

§ 171.263 Localizer automatic monitor system.

(a) The ISMLS localizer equipment must provide an automatic monitor system that transmits a warning to designated local and remote control points when any of the following occurs:

(1) A shift of the mean course line of the localizer from the runway centerline equivalent to more than 0.015 DDM at the ISMLS reference datum.

(2) For localizers in which the basic functions are provided by the use of a single-frequency system, a reduction of power output to less than 50 percent of normal or a loss of ground station identification transmissions.

(3) Changes of displacement sensitivity to a value differing by more than 17 percent from nominal value for the localizer.

(4) Failure of any part of the monitor itself. Such failure must automatically produce the same results as the malfunctioning of the element being monitored.

(b) Within 10 seconds of the occurrence of any of the conditions prescribed in paragraph (a) of this section, including periods of zero radiation, localizer signal radiation must cease or the navigation and identification components must be removed.

§ 171.265 Glide path performance requirements.

This section prescribes the performance requirements for glide path equipment components of the ISMLS. These requirements are based on the assumption that the aircraft is heading directly toward the facility.

(a) The glide slope antenna system must be located near the approach end of the runway, and the equipment must be adjusted so that the vertical path line will be in a sloping horizontal plane containing the centerline of the runway being served, and satisfy the coverage requirements prescribed in paragraph (g) of this section. For the purpose of obstacle clearance, location of the glide slope antenna system must be in accordance with the criteria specified in Subpart C of Part 97 of this chapter.

(b) The radiation from the glide path antenna system must produce a composite field pattern which is pulse duration modulated by a 90 Hz and a 150 Hz tone, which is the time average equivalent to amplitude modulation. The pattern must be arranged to provide a straight line descent path in the vertical plane containing the centerline of the runway, with the 150 Hz tone predominating below the path and the 90 Hz tone predominating above the path to at least an angle equal to 1.75θ. As used in this section theta (θ), denotes the nominal glide path angle. The glide path angle must be adjusted and maintained within 0.075θ.

(c) The glide path equipment must be capable of producing a radiated glide path from 3 to 9 degrees with respect to the horizontal. However, ISMLS glide path angles in excess of 3 degrees may be used to satisfy instrument approach procedures or to overcome an obstruction clearance problem, only in accordance with the criteria specified in Subpart C of Part 97 of this chapter.

(d) The downward extended straight portion of the ISMLS glide path must pass through the ISMLS reference datum at a height ensuring safe guidance over obstructions and safe and efficient use of the runway served. The height of the ISMLS reference datum must be in accordance with Subpart C of Part 97 of this chapter.

(e) The glide path equipment must operate in the band 5220 MHz to 5250 MHz. The frequency tolerance may not exceed ±0.0001 percent.

(f) The emission from the glide path equipment must be vertically polarized.

(g) The glide path equipment must provide signals sufficient to allow satisfactory operation of a typical aircraft installation insectors of 8 degrees on each side of the centerline of the ISMLS glide path, to a distance of at least 10 nautical miles up to 1.75θ and down to 0.45θ above the horizontal or to such lower angle at which 0.22 DDM is realized.

(h) To provide the coverage for glide path performance specified in paragraph (g) of this section, the minimum peak field strength within this coverage sector must be −82 dBW/m². The peak field strength must be provided on the glide path down to a height of 30 meters (100 feet) above the horizontal plane containing the threshold.

(i) Bends in the glide path may not have amplitudes which exceed the following:

Zone	Amplitude (DDM) (95 pct. probability)
Outer limit of coverage to ISMLS point "C."	0.035

The amplitude referred to is the DDM due to bends as realized on the mean ISMLS glide path correctly adjusted. In regions of the approach where ISMLS glide path curvature is significant, bend amplitude is calculated from the mean curved path, and not the downward extended straight line.

(j) Guidance modulation must be impressed on the microwave carrier of the radiated glide slope signal in the form of a unique summation of 90 Hz and 150 Hz sinusoidal modulation corresponding to the point direction of the particular beam which radiates the signal. Each of the effective beam positions must be illuminated in sequence for a short time interval. The scan rate must be synchronous with the 90 and 150 Hz tone base. The modulation impressed on each beam must be a sample of the combined 90 Hz and 150 Hz waveform appropriate for that particular beam direction and time slot. The actual modulation must be accomplished by appropriately varying the length of time the carrier is radiated during each beam illumination interval.

(k) The nominal depth of modulation of the radio frequency carrier due to each of the 90 Hz and 150 Hz tones must be 40 percent along the ISMLS glide path. The depth of modulation may not deviate outside the limits of 37.5 percent to 42.5 percent.

(l) The following tolerances apply to the frequencies of the modulating tones:

(1) The modulating tones must be 90 Hz and 150 Hz within 2.5 percent.

(2) The total harmonic content of the 90 Hz tone may not exceed 10 percent.

(3) The total harmonic content of the 150 Hz tone may not exceed 10 percent.

(m) At every half cycle of the combined 90 Hz and 150 Hz wave form, the modulation must be phase-locked so that, within the ISMLS half glide path sector, the demodulated 90 Hz and 150 Hz wave forms pass through zero in the same direction within 20 degrees of phase relative to the 150 Hz component. However, the phase need not be measured within the ISMLS half glide path sector.

(n) The nominal angular displacement sensitivity must correspond to a DDM of 0.0875 at an angular displacement above and below the glide path of 0.12θ. The glide path angular displacement sensitivity must be adjusted and maintained within ±25 percent of the nominal value selected. The upper and lower sectors must be as symmetrical as practicable within the limits prescribed in this paragraph.

(o) The DDM below the ISMLS glide path must increase smoothly for decreasing angle until a value of 0.22 DDM is reached. This value must be achieved at an angle not less than 0.30θ above the horizontal. However, if it is achieved at an angle above 0.45θ, the DDM value may not be less than 0.22 at least down to an angle of 0.45θ.

[Doc. No. 14120, 40 FR 36110, Aug. 19, 1975; 40 FR 41093, Sept. 5, 1975; 40 FR 43719, Sept. 23, 1975]

§ 171.267 Glide path automatic monitor system.

(a) The ISMLS glide path equipment must provide an automatic monitor system that transmits a warning to designated local and remote control points when any of the following occurs:

(1) A shift of the mean ISMLS glide path angle equivalent to more than 0.075θ.

(2) For glide paths in which the basic functions are provided by the use of a single frequency system, a reduction of power output to less than 50 percent.

(3) A change of the angle between the glide path and the line below the glide path (150 Hz predominating), at which a DDM of 0.0875 is realized by more than ± 0.0375θ.

(4) Lowering of the line beneath the ISMLS glide path at which a DDM of 0.0875 is realized to less than 0.75θ from the horizontal.

(5) Failure of any part of the monitor itself. Such failure must automatically produce the same results as the malfunctioning of the element being monitored.

(b) At glide path facilities where the selected nominal angular displacement sensitivity corresponds to an angle below the ISMLS glide path, which is close to or at the maximum limits specified, an adjustment to the monitor operating limits may be made to protect against sector deviations below 0.75θ from the horizontal.

(c) Within 10 seconds of the occurrence of any of the conditions prescribed in paragraph (a) of this section, including periods of zero radiation, glide path signal radiation must cease.

§ 171.269 Marker beacon performance requirements.

ISMLS marker beacon equipment must meet the performance requirements prescribed in Subpart H of this part.

§ 171.271 Installation requirements.

(a) The ISMLS facility must be permanent in nature, located, constructed, and installed according to accepted good engineering practices, applicable electric and safety codes, FCC licensing requirements, and paragraphs (a) and (c) of § 171.261.

(b) The ISMLS facility must have a reliable source of suitable primary power, either from a power distribution system or locally generated. Adequate power capacity must be provided for the operation of test and working equipment of the ISMLS.

(c) The ISMLS facility must have a continuously engaged or floating battery power source for the ground station for continued normal operation if the primary power fails. A trickle charge must be supplied to recharge the batteries during the period of available primary power. Upon loss and subsequent restoration of power, the batteries must be restored to full charge within 24 hours. When primary power is applied, the state of the battery charge may not affect the operation of the ISMLS ground station. The battery must permit continuation of normal operation for at least two hours under the normal operating conditions. The equipment must meet all specification requirements with or without batteries installed.

(d) There must be a means for determining, from the ground, the performance of the equipment including antennae, both initially and periodically.

(e) The facility must have, or be supplemented by, ground-air or landline communications services. At facilities within or immediately adjacent to air traffic control areas, and that are intended for use as instrument approach aids for an airport, there must be ground-air communications or reliable communications (at least a landline telephone) from the airport to the nearest Federal Aviation Administration air traffic control or communication facility. Compliance with this paragraph need not be shown at airports where an adjacent Federal Aviation Administration facility can communicate with aircraft on the ground at the airport and during the entire proposed instrument approach procedure. In addition, at low traffic density airports within or immediately adjacent to air traffic control zones or areas, and where extensive delays are not a factor, the requirements of this paragraph may be reduced to reliable communications (at least a landline telephone) from the airport to the nearest Federal Aviation Administration air traffic control or communications facility, if an adjacent Federal Aviation Administration facility can communicate with aircraft during the proposed instrument approach procedure, at least down to the minimum en route altitude for the controlled area.

(f) Except where no operationally harmful interference will result, at locations where two separate ISMLS facilities serve opposite ends of a single runway, an interlock must ensure that only the facility serving the approach direction in use can radiate.

§ 171.273 Maintenance and operations requirements.

(a) The owner of the facility must establish an adequate maintenance system and provide qualified maintenance personnel to maintain the facility at the level attained at the time it was commissioned. Each person who maintains a facility must meet at least the Federal Communications Commission's licensing requirements and show that he has the special knowledge and skills needed to maintain the facility, including proficiency in maintenance procedures and the use of specialized test equipment.

(b) In the event of out-of-tolerance conditions or malfunctions, as evidenced by receiving two successive pilot reports, the owner must close the facility be ceasing radiation, and issue a "Notice to Airman" (NOTAM) that the facility is out of service.

(c) The owner must prepare, and obtain approval of, an operations and maintenance manual that sets forth mandatory procedures for operations, periodic maintenance, and emergency maintenance, including instructions on each of the following:

(1) Physical security of the facility.

(2) Maintenance and operations by authorized persons.

(3) FCC licensing requirements for operations and maintenance personnel.

(4) Posting of licenses and signs.

(5) Relation between the facility and FAA air traffic control facilities, with a description of the boundaries of controlled airspace over or near the facility, instructions for relaying air traffic control instructions and information, if applicable, and instructions for the operation of an air traffic advisory service if the facility is located outside of controlled airspace.

(6) Notice to the Administrator of any suspension of service.

(7) Detailed and specific maintenance procedures and servicing guides stating the frequency of servicing.

(8) Air-ground communications, if provided, expressly written or incorporating appropriate sections of FAA manuals by reference.

(9) Keeping of station logs and other technical reports, and the submission of reports required by § 171.275.

(10) Monitoring of the ISMLS facility.

(11) Inspections by United States personnel.

(12) Names, addresses, and telephone numbers of persons to be notified in an emergency.

(13) Shutdowns for periodic maintenance and issue of "Notices to Airmen" for routine or emergency shutdowns.

(14) Commissioning of the ISMLS facility.

(15) An acceptable procedure for amending or revising the manual.

(16) An explanation of the kinds of activities (such as construction or grading) in the vicinity of the ISMLS facility that may require shutdown or recertification of the ISMLS facility by FAA flight check.

(17) Procedures for conducting a ground check of the localizer course alignment, width, and clearance, glide path elevation angle and course width, and marker beacon power, and modulation.

(18) The following information concerning the ISMLS facility:

(i) Facility component locations with respect to airport layout, instrument runways, and similar areas.

(ii) The type, make, and model of the basic radio equipment that provides the service.

(iii) The station power emission and frequencies of the ISMLS localizer, glide path, beacon markers, and associated compass locators, if any.

(iv) The hours of operation.

(v) Station identification call letters and method of station identification and the time spacing of the identification.

(vi) A description of the critical parts that may not be changed, adjusted, or repaired without an FAA flight check to confirm published operations.

(d) The owner or his maintenance representative must make a ground check of the ISMLS facility periodically in accordance with procedures approved by the FAA at the time of commissioning, and must report the results of the checks as provided in § 171.275.

(e) Modifications to an ISMLS facility may be made only after approval by the FAA of the proposed modification submitted by the owner.

(f) The owner or the owner's maintenance representative must participate in inspections made by the FAA.

(g) Whenever it is required by the FAA, the owner must incorporate improvements in ISMLS maintenance.

(h) The owner or his maintenance representative must provide a sufficient stock of spare parts, including solid state components, or modules to make possible the prompt replacement of components or modules that fail or deteriorate in service.

(i) FAA approved test instruments must be used for maintenance of the ISMLS facility.

(j) The mean corrective maintenance time of the ISMLS equipment may not exceed 0.5 hours, with a maximum corrective maintenance time of not greater than 1.5 hours. This measure applies to failures of the monitor, transmitter and associated antenna assemblies, limited to unscheduled outage and out-of-tolerance conditions.

(k) The mean time between failures of the ISMLS equipment may not be less than 1,500 hours. This measure applies to unscheduled outages, out-of-tolerance conditions, and failures of the monitor, transmitter, and associated antenna assemblies.

(l) Inspection consists of an examination of the ISMLS equipment to ensure that unsafe operating conditions do not exist.

(m) Monitoring of the ISMLS radiated signal must ensure a high degree of integrity and minimize the requirements for ground and flight inspection. The monitor must be checked periodically during the in-service test evaluation period for calibration and stability. These tests and ground checks of glide slope, localizer, and marker beacon radiation characteristics must be conducted in accordance with the maintenance requirements of this section.

§ 171.275 Reports.

The owner of the ISMLS facility or his maintenance representative must make the following reports at the indicated time to the appropriate FAA Regional Office where the facility is located.

(a) *Facility Equipment Performance and Adjustment Data (FAA Form 198).* The FAA Form 198 shall be filled out by the owner or his maintenance representative with the equipment adjustments and meter readings as of the time of facility commissioning. One copy must be kept in the permanent records of the facility and two copies must be sent to the appropriate FAA Regional Office. The owner or his maintenance representative must revise the FAA Form 198 data after any major repair, modernization, or retuning to reflect an accurate record of facility operation and adjustment. In the event the data are revised, the owner or his maintenance representative shall notify the appropriate FAA Regional Office of such revisions, and forward copies of the revisions to the appropriate FAA Regional Office.

(b) *Facility Maintenance Log (FAA Form 6030—1).* FAA Form 6030-1 is a permanent record of all the activities required to maintain the ISMLS facility. The entries must include all malfunctions met in maintaining the facility including information on the kind of work and adjustments made, equipment failures, causes (if determined) and corrective action taken. In addition, the entries must include completion of periodic maintenance required to maintain the facility. The owner or his maintenance representative must keep the original of each form at the facility and send a copy to the appropriate FAA Regional Office at the end of each month in which it is prepared. However, where an FAA approved remote monitoring system is installed which precludes the need for periodic maintenance visits to the facility, monthly reports from the remote monitoring system control point must be forwarded to the appropriate FAA Regional Office, and a hard copy retained at the control point.

(c) *Technical Performance Record (FAA Form 418).* FAA Form 418 contains a record of system parameters, recorded on each scheduled visit to the facility. The owner or his maintenance representative shall keep the original of each month's record at the facility and send a copy of the form to the appropriate FAA Regional Office.

Subpart J—Microwave Landing System (MLS)

AUTHORITY: Secs. 305, 307, 313(a), 601, and 606, Federal Aviation Act of 1958, as amended (49 U.S.C. 1346, 1348, 1354(a), 1421, 1426); sec. 6(c), Dept. of Transportation Act (49 U.S.C. 1655(c)), unless otherwise noted.

SOURCE: Docket No. 20669, 46 FR 61566, Dec. 17, 1981, unless otherwise noted.

§ 171.301 Scope.

This subpart sets forth minimum requirements for the approval, installation, operation and maintenance of non-Federal Microwave Landing System (MLS) facilities that provide the basis for instrument flight rules (IFR) and air traffic control procedures.

§ 171.303 Definitions.

As used in this subpart:

"Back azimuth reference datum" means a point located 15 meters (50 feet) above the runway centerline at the runway midpoint.

"Basic data" means data transmitted by the ground equipment that are associated directly with the operation of the landing guidance system.

"Beamwidth" means the width of the scanning beam main lobe measured at the −3 dB points and defined in angular units on the boresight, in the horizontal plane for the azimuth function and in the vertical plane for the elevation function.

"Clearance guidance sector" means the volume of airspace, inside the coverage sector, within which the azimuth guidance information provided is not proportional to the angular displacement of the aircraft, but is a constant fly-left or fly-right indication of the direction relative to the approach course the aircraft should proceed in order to enter the proportional guidance sector.

"Control Motion Noise (CMN)" means those fluctuations in the guidance which affect aircraft attitude, control surface motion, column motion, and wheel motion. Control motion noise is evaluated by filtering the flight error record with a bandpass filter which has corner frequencies at 0.3 radian/sec and 10 radians/sec for azimuth data and 0.5 radian/sec and 10 radians/sec for elevation data.

"Data rate" means the average number of times per second that transmissions occur for a given function.

"Differential Phase Shift Keying (DPSK)" means differential phase modulation of the radio frequency carrier with relative phase states of 0 degree or 180 degrees.

"Failure" means the inability of an item to perform within previously specified limits.

"Guard time" means an unused period of time provided in the transmitted signal format to allow for equipment tolerances.

"Integrity" means that quality which relates to the trust which can be placed in the correctness of the information supplied by the facility.

"Mean corrective time" means the average time required to correct an equipment failure over a given period, after a service technician reaches the facility.

"Mean course error" means the mean value of the azimuth error along a specified radial of the azimuth function.

"Mean glide path error" means the mean value of the elevation error along the glidepath of the elevation function.

"Mean time between failures (MTBF)" means the average time between equipment failures over a given period.

"Microwave Landing System (MLS)" means the MLS selected by ICAO for international standardization.

"Minimum glidepath" means the lowest angle of descent along the zero degree azimuth that is consistent with published approach procedures and obstacle clearance criteria.

"MLS approach reference datum" means a point 15 meters (50 feet) above the runway threshold on the minimum glidepath.

"MLS back azimuth reference datum" means a point 15 meters (50 feet) above the runway centerline at the runway midpoint.

"MLS datum point" means a point defined by the intersection of the runway centerline with a vertical plane perpendicular to the centerline and passing through the elevation antenna phase center.

"Out of Coverage Indication (OCI)" means a signal radiated into areas outside the intended coverage sector where required to specifically prevent invalid removal of an airborne warning indication in the presence of misleading guidance information.

"Path Following Error (PFE)" means the guidance perturbations which could cause aircraft displacement from the desired course or glidepath. It is composed of a path following noise and of the mean course error in the case of azimuth functions, or the mean glidepath error in the case of elevation functions. Path following errors are evaluated by filtering the flight error record with a second order low pass filter which has a corner frequency at 0.5 radian/sec for azimuth data or 1.5 radians/sec for elevation data.

"Path Following Noise (PFN)" means that portion of the guidance signal error which could cause aircraft displacement from the actual mean course line or mean glidepath as appropriate.

"Split-site ground station" means the type of ground station in which the azimuth portion of the ground station is located on the centerline beyond the stop end of the runway, and the elevation portion is located alongside the runway near the approach end.

"Time Division Multiplex (TDM)" means that each function is transmitted on the same frequency in time sequence, with a distinct preamble preceding each function transmission.

§ 171.305 Requests for IFR procedure.

(a) Each person who requests an IFR procedure based on an MLS facility which that person owns must submit the following information with that request:

(1) A description of the facility and evidence that the equipment meets the performance requirements of §§ 171.309, 171.311, 171.313, 171.315, 171.317, 171.319, and 171.321 and is fabricated and installed in accordance with § 171.323.

(2) A proposed procedure for operating the facility.

(3) A proposed maintenance organization and a maintenance manual that meets the requirements of § 171.325.

(4) A statement of intent to meet the requirements of this subpart.

(5) A showing that the facility has an acceptable level of operational reliability and an acceptable standard of performance. Previous equivalent operational experience with a facility with identical design and operational characteristics will be considered in showing compliance with this subparagraph.

(b) FAA inspects and evaluates the MLS facility; it advises the owner of the results, and of any required changes in the MLS facility or in the maintenance manual or maintenance organization. The owner must then correct the deficiencies, if any, and operate the MLS facility for an in-service evaluation by the FAA.

§ 171.307 Minimum requirements for approval.

(a) The following are the minimum requirements that must be met before the FAA approves an IFR procedure for a non-Federal MLS facility:

(1) The performance of the MLS facility, as determined by flight and ground inspection conducted by the FAA, must meet the requirements of §§ 171.309, 171.311, 171.313, 171.315, 171.317, 171.319, and 171.321.

(2) The fabrication and installation of the equipment must meet the requirements of § 171.323.

(3) The owner must agree to operate and maintain the MLS facility in accordance with § 171.325.

(4) The owner must agree to furnish operational records as set forth in § 171.327 and agree to allow the FAA to inspect the facility and its operation whenever necessary.

(5) The owner must assure the FAA that he will not withdraw the MLS facility from service without the permission of the FAA.

(6) The owner must bear all costs of meeting the requirements of this section and of any flight or ground inspection in accordance with the FAA Flight Inspection Manual made before the MLS facility is commissioned, except that the FAA may bear certain

costs subject to budgetary limitations and policy established by the Administrator. Incorporated by reference is Flight Inspection Manual, FAA Handbook 8200.1 through change 35, dated May 15, 1981, which prescribes standardized procedures for flight inspection of air navigation facilities. It is available from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 and also available for inspection at the Office of the Federal Register Information Center, Room 8301, 1100 L Street, NW., Washington, D.C., 20408.

§ 171.309 General requirements.

The MLS is a precision approach and landing guidance system which provides position information and various ground-to-air data. The position information is provided in a wide coverage sector and is determined by an azimuth angle measurement, an elevation angle measurement and a range (distance) measurement.

(a) An MLS constructed to meet the requirements of this subpart must include:

(1) Approach azimuth equipment, associated monitor, remote control and indicator equipment.

(2) Approach elevation equipment, associated monitor, remote control and indicator equipment.

(3) A means for the transmission of basic data words, associated monitor, remote control and indicator equipment.

(4) Distance measuring equipment (DME), associated monitor, remote control and indicator equipment.

(5) Remote controls for paragraph (a) (1), (2), (3), and (4) of this section must include as a minimum on/off and reset capabilities and may be integrated in the same equipment.

(6) At locations where a VHF marker beacon (75 MHz) is already installed, it may be used in lieu of the DME equipment.

(b) In addition to the equipment required in paragraph (a) of this section the MLS may include:

(1) Back azimuth equipment, associated monitor, remote control and indicator equipment.

(2) A wider proportional guidance sector which exceeds the minimum specified in §§ 171.313 and 171.317.

(3) Precision DME, associated monitor, remote control and indicator equipment.

(4) VHF marker beacon (75 MHz), associated monitor, remote control and indicator equipment.

(5) The MLS signal format will accommodate additional functions (e.g., flare elevation) which may be included as desired. Remote controls for paragraphs (b) (1), (3) and (4) of this section must include as a minimum on/off and reset capabilities, and may be integrated in the same equipment.

(c) MLS ground equipment must be designed to operate on a nominal 120/240 volt, 60 Hz, 3-wire single phase AC power source and must meet the following service conditions:

(1) AC line parameters, DC voltage, elevation and duty:

120 VAC nominal value—102 V to 138 V (±1 V)*

240 VAC nominal value—204 V to 276 V (±2 V)*

60 Hz AC line frequency—57 Hz to 63 Hz (±0.2 Hz)*

24 VDC nominal value—20 V to 30 V (±0.25 V)*

*NOTE: Where discrete values of the above frequency or voltages are specified for testing purposes, the tolerances given in parentheses indicated by an asterisk apply to the test instruments used to measure these parameters.

Elevation—0 to 3,000 meters (10,000 feet) above sea level

Duty—Continuous, unattended

(2) Ambient conditions within the shelter for electronic equipment installed in shelters are:

Temperature, −10°C to +50°C
Relative humidity, 5% to 90%

(3) Ambient conditions for electronic equipment and all other equipment installed outdoors (for example, antenna, field detectors, and shelters):

Temperature, −50°C to +70°C
Relative humidity, 5% to 100%

(4) All equipment installed outdoors must operate satisfactorily under the following conditions:

Wind Velocity: The ground equipment shall remain within monitor limits with wind velocities of up to 70 knots from such directions that the velocity component perpendicular to runway centerline does not exceed 35 knots. The ground equipment shall withstand winds up to 100 knots from any direction without damage.

Hail Stones: 1.25 centimeters (½ inch) diameter.

Rain: Provide required coverage with rain falling at a rate of 50 millimeters (2 inches) per hour, through a distance of 9 kilometers (5 nautical miles) and with rain falling at the rate of 25 millimeters (1 inch) per hour for the additional 28 kilometers (15 nautical miles).

Ice Loading: Encased in 1.25 centimeters (½ inch) radial thickness of clear ice.

Antenna Radome De-Icing: Down to -6°C (20°F) and wind up to 35 knots.

(d) The transmitter frequencies of an MLS must be in accordance with the frequency plan approved by the FAA.

(e) The DME component listed in paragraph (a)(4) of this section must comply with the minimum standard performance requirements specified in Subpart G of this part.

(f) The marker beacon components listed in paragraph (b)(4) of this section must comply with the minimum standard performance requirements specified in Subpart H of this part.

[Doc. No. 20669, 46 FR 61566, Dec. 17, 1981, as amended by Amdt. 171-11, 47 FR 46260, Oct. 18, 1982]

§ 171.311 Signal format requirements.

The signals radiated by the MLS must conform to the signal format in which angle guidance functions and data functions are transmitted sequentially on the same C-band frequency. Each function is identified by a unique digital code which initializes the airborne receiver for proper processing. The signal format must meet the following minimum requirements:

(a) *Frequency assignment.* The ground components (except DME/Marker Beacon) must operate on a single frequency assignment or channel, using time division multiplexing. These components must be capable of operating on any one of the 200 channels spaced 300 KHz apart with center frequencies from 5031.0 MHz to 5090.7 MHz and with channel numbering as shown in Table 1. The operating radio frequencies of all ground components must not vary by more than ±10 KHz from the assigned frequency. Any one transmitter frequency must not vary more than ±50 Hz in any one second period.

TABLE 1—FREQUENCY CHANNEL PLAN

Channel No	Frequency (MHz)
500	5031.0
501	5031.3
502	5031.6
503	5031.9
504	5032.2
505	5032.5
506	5032.8
507	5033.1
508	5033.4
509	5033.7
510	5034.0
511	5034.3
. . . . .	
598	5060.4
599	5060.7
600	5061.0
601	5061.3
. . . . .	
698	5090.4
699	5090.7

(b) *Polarization.* (1) The radio frequency emissions from all ground equipment must be nominally vertically polarized. Any horizontally polarized radio frequency emission component from the ground equipment must not have incorrectly coded angle information such that the limits specified in paragraphs (b)(2) and (3), of this section are exceeded.

(2) Rotation of the receiving antenna thirty degrees from the vertically polarized position must not cause the guidance information to change by more than 40% of the allowable path following error applicable at that location.

(3) All system accuracy limits must be met with the receiving antenna up to thirty degrees from the vertically polarized position.

(c) *Modulation requirements.* Each function transmitter must be capable of DPSK and continuous wave (CW) modulations of the RF carrier which have the following characteristics:

(1) *DPSK.* The DPSK signal must have the following characteristics:

bit rate
15.625KHz
bit length
64 usec.
logic "0"

no phase transition
    logic "1"
phase transition
    phase transition
less than 10 μsec.
    phase tolerance
± 10 degrees

It is intended that the phase transition be made without amplitude modulation. Figure 1 illustrates the phase characteristics of two logic "1" bits in sequence. Control must be such that the time interval for phase transition does not exceed 10 μsec and the phase rate of change is consistent with the requirements of paragraph (d) of this section. The phase characteristic inside the transition region must be as linear as possible and in no case deviate more than ± 90 degrees from a linear transition.

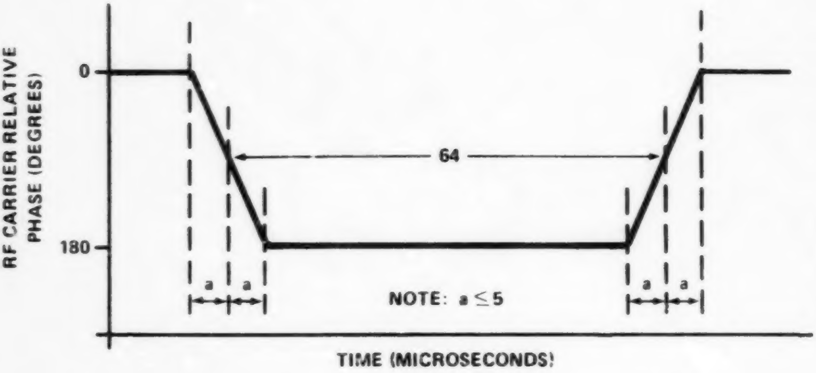


FIGURE 1. DPSK PHASE CHARACTERISTICS

(2) *CW.* The CW pulse transmissions and the CW angle transmissions as may be required in the signal format of any function must have characteristics such that the requirements of paragraph (d) of this section are met.

(d) *Radio Frequency Signal Spectrum.* The transmitted signal must be such that during the transmission time, the mean power density above a height of 600 meters (2000 feet) does not exceed -100.5 dBW/m^2 for angle guidance and -95.5 dBW/m^2 for data, as measured in 150 KHz bandwidth centered at a frequency of 840 KHz or more from the assigned frequency.

(e) *Synchronization.* Synchronization between the azimuth and elevation components is required and, in split-site configurations, would normally be accomplished by landline interconnections. Synchronization monitoring must be provided to preclude function overlap.

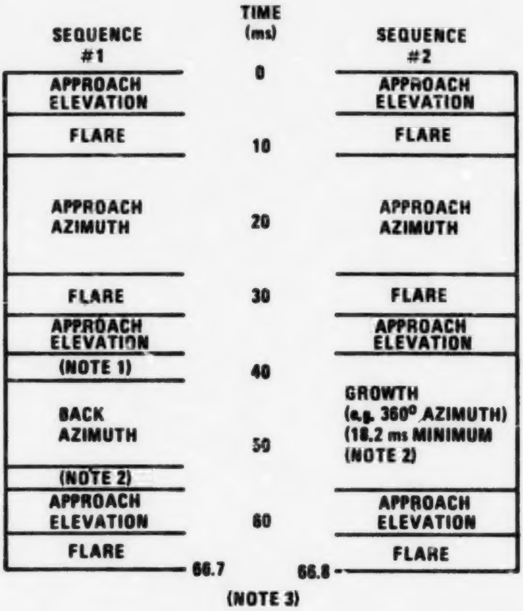
(f) *Transmission rates.* Angle guidance and data signals must be transmitted at the following average repetition rates:

Function	Average data rate (Hertz)
Approach Azimuth	13 ± 0.5
High Rate Approach Azimuth	[1] 39 ± 1.5
Approach Elevation	39 ± 1.5
Back Azimuth	6.5 ± 0.25
Basic Data	([2])

[1] The higher rate is recommended for azimuth scanning antennas with beamwidths greater than two degrees. It should be noted that the time available in the signal format for additional functions is limited when the higher rate is used.

[2] Refer to Basic Data Function Timing, Table 7.

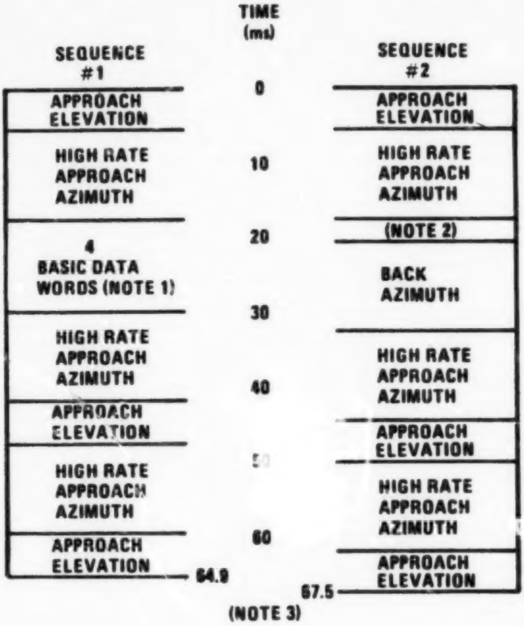
(g) *Transmission Sequences.* Sequences of angle transmissions which will generate the required repetition rates are shown in Figures 2 and 3.


SEQUENCE #1
TIME (ms)
SEQUENCE #2
0
APPROACH ELEVATION
APPROACH ELEVATION
FLARE
10
FLARE
APPROACH AZIMUTH
20
APPROACH AZIMUTH
FLARE
30
FLARE
APPROACH ELEVATION
APPROACH ELEVATION
(NOTE 1)
40
BACK AZIMUTH
GROWTH (e.g. 360° AZIMUTH) (18.2 ms MINIMUM (NOTE 2)
50
(NOTE 2)
APPROACH ELEVATION
60
APPROACH ELEVATION
FLARE
FLARE
66.7
66.8
(NOTE 3)

NOTES:

1. WHEN BACK AZIMUTH IS PROVIDED, BASIC DATA WORD #2 MUST BE TRANSMITTED ONLY IN THIS POSITION.
2. BASIC DATA WORDS MAY BE TRANSMITTED IN ANY OPEN TIME PERIODS.
3. THE TOTAL TIME DURATION OF SEQUENCE #1 PLUS SEQUENCE #2 MUST NOT EXCEED 134 ms.

FIGURE 2. TRANSMISSION SEQUENCE PAIR WHICH PROVIDES FOR ALL MLS ANGLE GUIDANCE FUNCTIONS

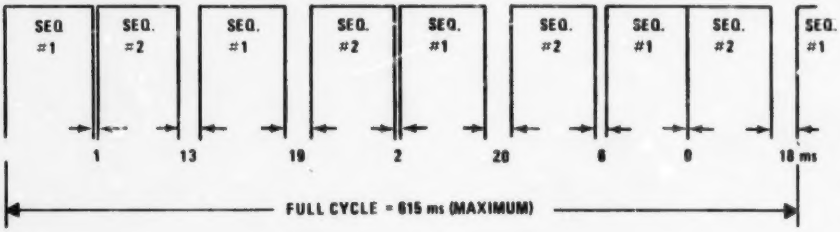

TIME
(ms)
SEQUENCE #1
SEQUENCE #2
0
10
20
30
40
50
60
APPROACH ELEVATION
HIGH RATE APPROACH AZIMUTH
4 BASIC DATA WORDS (NOTE 1)
HIGH RATE APPROACH AZIMUTH
APPROACH ELEVATION
HIGH RATE APPROACH AZIMUTH
APPROACH ELEVATION
64.9
APPROACH ELEVATION
HIGH RATE APPROACH AZIMUTH
(NOTE 2)
BACK AZIMUTH
HIGH RATE APPROACH AZIMUTH
APPROACH ELEVATION
HIGH RATE APPROACH AZIMUTH
APPROACH ELEVATION
67.5
(NOTE 3)

NOTES:

1. BASIC DATA WORDS MAY BE TRANSMITTED IN ANY OPEN TIME PERIODS.
2. WHEN BACK AZIMUTH IS PROVIDED, BASIC DATA WORD #2 MUST BE TRANSMITTED ONLY IN THIS POSITION.
3. THE TOTAL TIME DURATION OF SEQUENCE #1 PLUS SEQUENCE #2 MUST NOT EXCEED 134 ms.

FIGURE 3. TRANSMISSION SEQUENCE PAIR WHICH PROVIDES FOR THE MLS HIGH RATE APPROACH AZIMUTH ANGLE GUIDANCE FUNCTION

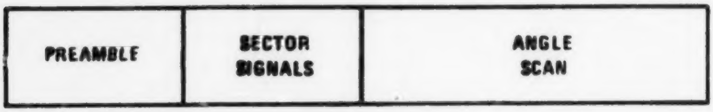
(h) *TDM cycle.* The time periods between angle transmission sequences must be varied so that exact repetitions do not occur within periods of less than 0.5 second in order to protect against synchronous interference. One such combination of sequences is shown in Figure 4 which forms a full multiplex cycle. Basic data may be transmitted during suitable open times within or between the sequences.


SEQ #1
SEQ. #2
SEQ. #1
SEQ. #2
SEQ. #1
SEQ. #2
SEQ. #1
SEQ. #2
SEQ. #1
1
13
19
2
20
6
0
18 ms
FULL CYCLE = 615 ms (MAXIMUM)

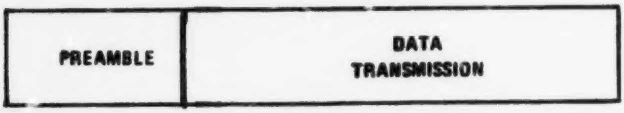
NOTE: Angle sequences are those from Figure 2 or 3. Do not mix sequences.

FIGURE 4. A COMPLETE FUNCTION MUTIPLEX CYCLE

(i) *Function Formats (General)*, Each angle function must contain the following elements: A preamble; sector signals; and a TO and FRO angle scan organized as shown in Figure 5a. Each data function must contain a preamble and a data transmission period organized as shown in Figure 5b.


PREAMBLE
SECTOR SIGNALS
ANGLE SCAN

(a) ANGLE FUNCTION

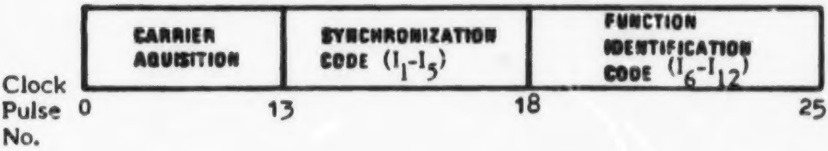

PREAMBLE
DATA TRANSMISSION

(b) DATA FUNCTION

FIGURE 5. FUNCTION FORMAT

(1) *Preamble format.* The transmitted angle and data functions must use the preamble format shown in Figure 6. This format consists of a carrier acquisition period of unmodulated CW transmission followed by a receiver synchronization code and a function identification code. The preamble timing must be in accordance with Table 2.

FIGURE 6. PREAMBLE ORGANIZATION


CARRIER AQUISITION
SYNCHRONIZATION CODE (I_1-I_5)
FUNCTION IDENTIFICATION CODE (I_6-I_{12})
Clock Pulse No.
0
13
18
25

(i) *Digital codes.* The coding used in the preamble for receiver synchronization is a Barker code logic 11101. Receiver timing is established on the transition to the last bit (I_5) of the code (see Table 2). The function identification codes must be as shown in Table 3. The last two bits (I^1 and I_{12}) of the code are parity bits obeying the equations:

$I_6+I_7+I_8+I_9+I_{10}+I_{11}=$ Even
$I_6+I_8+I_{10}+I_{12}=$ Even

(ii) *Data modulation.* The digital code portions of the preamble must be DPSK modulated in accordance with § 171.311(c)(1) and must be transmitted throughout the function coverage volume.

TABLE 2—PREAMBLE TIMING [1]

Event	Event time slot begins at: [2]	
	15.625 kHz clock pulse (number)	Time (milliseconds)
Carrier acquisition (CW transmission)	0	0
Receiver reference time code:		
$I_1=1$	13	0.832
$I_2=1$	14	0.896
$I_3=1$	15	0.960
$I_4=0$	16	1.024
$I_5=1$	17	[3] 1.088
Function identification code:		
I_6	18	1.152
I_7	19	1.216
I_8	20	1.280
I_9 (see Table 3)	21	1.344
I_{10}	22	1.408
I_{11}	23	1.472
I_{12}	24	1.536
End preamble	25	1.600

[1] Applies to all functions transmitted.

[2] The previous event time slot ends at this time.

[3] Reference time for receiver synchronization for all function timing.

TABLE 3—FUNCTION IDENTIFICATION CODES

Function	Code						
	I_6	I_7	I_8	I_9	I_{10}	I_{11}	I_{12}
Approach azimuth	0	0	1	1	0	0	1
High rate approach azimuth	0	0	1	0	1	0	0
Approach elevation	1	1	0	0	0	0	1
Back azimuth	1	0	0	1	0	0	1
Basic data 1	0	1	0	1	0	0	0
Basic data 2	0	1	1	1	1	0	0
Basic data 3	1	0	1	0	0	0	0
Basic data 4	1	0	0	0	1	0	0
Basic data 5	1	1	0	1	1	0	0
Basic data 6	0	0	0	1	1	0	1
Basic data 7	1	1	1	0	0	1	0
Basic data 8	1	0	1	0	1	1	1

(2) *Angle function formats.* The timing of the angle transmissions must be in accordance with Tables 4a, 4b, and 5. The actual timing of the TO and FRO scans must be as required to meet the accuracy requirements of §§ 171.313 and 171.317.

(i) *Preamble.* Must be in accordance with requirements of § 171.311(i)(1).

(ii) *Sector signals.* In all azimuth formats, sector signals must be transmitted to provide Morse Code identification, airborne antenna selection, and system test signals. These signals are not required in the elevation formats. In addition, if the signal from an installed ground component results in a valid indication in an area where no valid guidance should exist, OCI signals must be radiated as provided for in the signal format (see Tables 4a, 4b, and 5). The sector signals are defined as follows:

(A) *Morse code.* DPSK transmissions that will permit Morse Code facility identification in the aircraft by a four letter code starting with the letter "M" must be included in all azimuth functions. They must be transmitted and repeated at approximately equal intervals, not less than six times per minute, during which time the ground subsystem is available for operational use. When the transmissions of the ground subsystem are not available, the identification signal must be suppressed. The audible tone in the aircraft is started by setting the Morse Code bit to logic "1" and stopped by a logic "0" (see Tables 4a and 4b). The identification code characteristics must conform to the following: The dot must be between 0.13 and 0.16 second in duration, and the dash between 0.39 and 0.48 second. The duration between dots and/or dashes must be one dot plus or minus 10%. The duration between characters (letters) must not be less then three dots.

(B) *Airborne antenna selection.* A signal for airborne antenna selection shall be transmitted as a "zero" DPSK signal lasting for a six-bit period (See Tables 4a and 4b).

TABLE 4a—APPROACH AZIMUTH FUNCTION TIMING

Event	Event time slot begins at [1]	
	15.625 kHz clock pulse (number)	Time (milliseconds)
Preamble	0	0
Morse code	25	1.600
Antenna select	26	1.664
Rear OCI	32	2.048
Left OCI	34	2.176
Right OCI	36	2.304
TO test	38	2.432
TO scan [2]	40	2.560
Pause		8.760
Mid scan point		9.060
FRO scan [2]		9.360
FRO test		15.560
End function (airborne)		15.688
End guard time; end function (ground)		15.900

[1] The previous event time slot ends at this time.

[2] The actual commencement and completion of the TO and FRO scan transmissions are dependent on the amount of proportional guidance provided. The time slots provided will accommodate a maximum scan of ±62 degrees. Scan timing must be compatible with accuracy requirements.

TABLE 4b—HIGH RATE APPROACH AZIMUTH AND BACK AZIMUTH FUNCTION TIMING

Event	Event time slot begins at: [1]	
	15.625 kHz clock pulse (number)	Time (milliseconds)
Preamble	0	0
Morse code	25	1.600
Antenna select	26	1.664
Rear OCI	32	2.048
Left OCI	34	2.176
Right OCI	36	2.304
TO test	38	2.432
TO scan [2]	40	2.560
Pause		6.760
Mid scan point		7.060
FRO scan [2]		7.360
FRO test		11.560
End function (airborne)		11.688
End guard time; end function (ground)		11.900

[1] The previous event time slot ends at this time.

[2] The actual commencement and completion of the TO and FRO scan transmissions are dependent upon the amount of proportional guidance provided. The time slots provided will accommodate a maximum scan of ±42 degrees. Scan timing must be compatible with accuracy requirements.

TABLE 5—APPROACH ELEVATION FUNCTION TIMING

Event	Event time slot begins at [1]	
	15.625 kHz clock pulse (number)	Time (milliseconds)
Preamble	0	0
Processor pause	25	1.600
OCI	27	1.728
TO scan [2]	29	1.856
Pause		3.406
Mid scan point		3.606
FRO scan [2]		3.806
End function (airborne)		5.356
End guard time; end function (ground)		5.600

[1] The previous event time slot ends at this time.

[2] The actual commencement and completion of the TO and FRO scan transmissions are dependent upon the amount of proportional guidance provided. The time slots provided will accommodate a maximum scan of −1.5 degrees to +29.5 degrees. Scan timing must be compatible with accuracy requirements.

(C) *OCI.* Where OCI pulses are used, they must be: (*1*) Greater than any guidance signal in the OCI sector; (*2*) at least 5dB less than the level of the scanning beam within the proportional guidance sector; and (*3*) for azimuth functions with clearance signals, at least 5dB less than the level of the left (right) clearance pulses within the left (right) clearance sector. The duration of each pulse measured at the half amplitude points must be 100 (±10) microseconds and the rise and fall times must be less than 10 microseconds.

NOTE: If desired, two pulses may be sequentially transmitted in each OCI time slot. Where pulse pairs are used, the duration of each pulse must be 45 (±5) microseconds and the rise and fall times must be less than 10 microseconds.

(D) *System test.* Time slots are provided in Tables 4a and 4b to allow radiation of TO and FRO test pulses. Radiation of these pulses is not required, however, since the characteristics of these pulses have not yet been standardized.

(iii) *Angle encoding.* The encoding must be as follows:

(A) *General.* Azimuth and elevation angles are encoded by scanning a narrow beam between the limits of the proportional coverage sector first in one direction (the "TO" scan) and then in the opposite direction (the "FRO" scan). Angular information must be encoded by the amount of time separation between the beam centers of the TO and FRO scanning beam pulses. The TO and FRO transmissions must be symmetrically disposed about the midscan point listed in Table 4a, 4b, 5, and 7. The midscan point and the center of the time interval between the TO and FRO scan transmissions must coincide with a tolerance of ±10 μsec. Angular coding must be linear with angle and properly decoded using the formula:

$$\theta = \frac{V}{2}\,(T_0 - t)$$

where:

θ = Receiver angle in degrees

V = Scan velocity in degrees per microsecond

T_0 = Time separation in microseconds between TO and FRO beam centers corresponding to zero degrees.

t = Time separation in microseconds between TO and FRO beam centers

The timing requirements are listed in Table 6 and illustrated in Figure 7.

TABLE 6. ANGLE SCAN TIMING CONSTANTS

Function	Max value of t (usec)	T_0 (usec)	V (deg/usec)	T_m (usec)	Pause time (usec)	T_t (usec)
Approach Azimuth	13,000	6,800	0.02	7,972	600	13,128
High Rate Approach Azimuth	9,000	4,800	0.02	5,972	600	9,128
Approach Elevation	3,500	3,350	0.02	2,518	400	N/A
Back Azimuth	9,000	4,800	−0.02	5,972	600	9,128

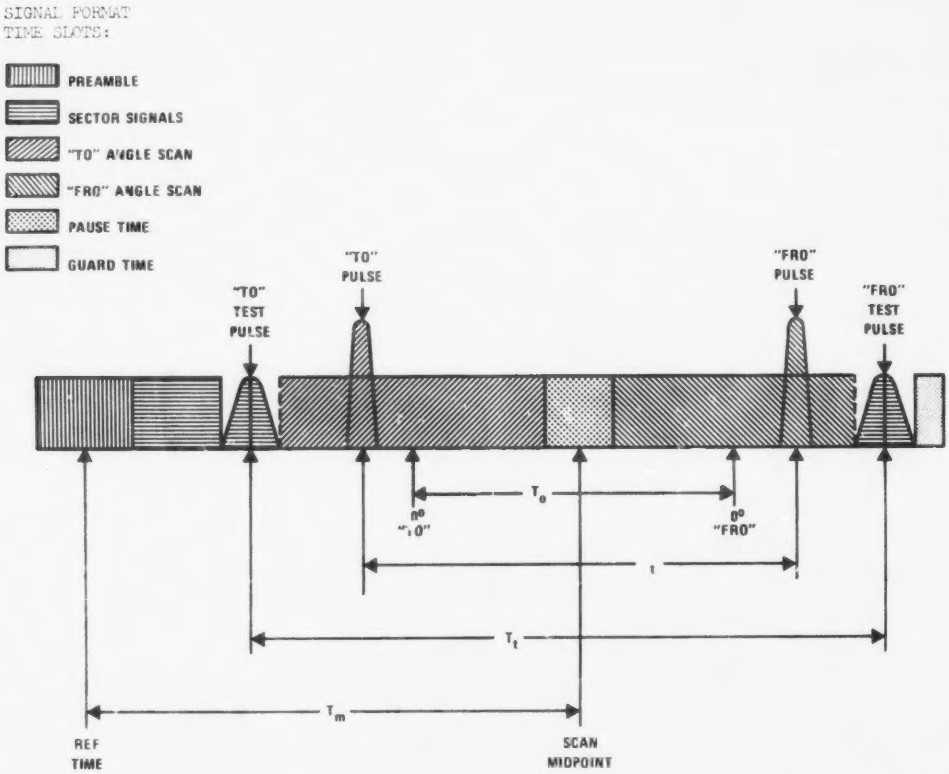
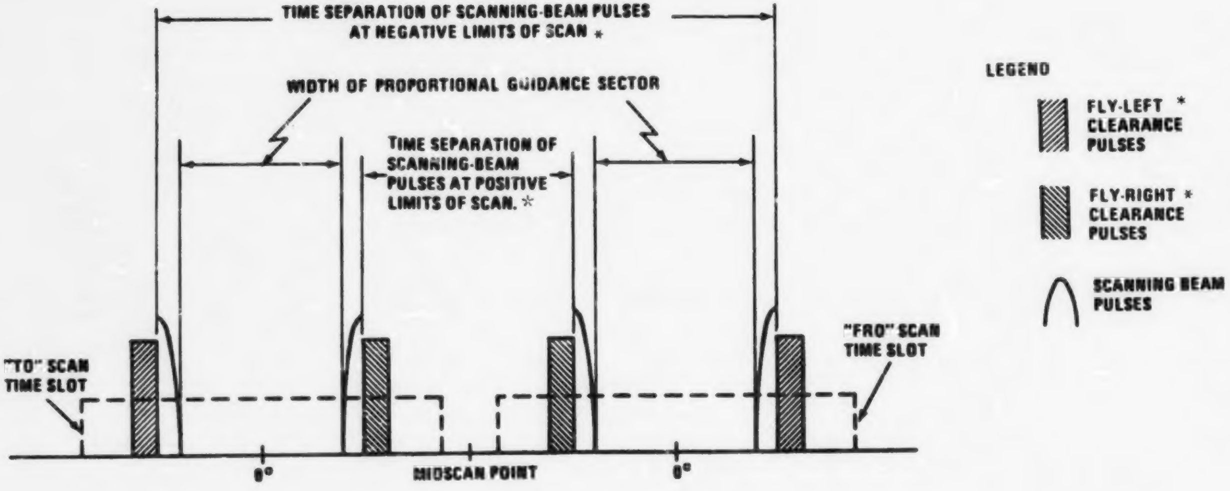

SIGNAL FORMAT
TIME SLOTS:
PREAMBLE
SECTOR SIGNALS
"TO" ANGLE SCAN
"FRO" ANGLE SCAN
PAUSE TIME
GUARD TIME
"TO" TEST PULSE
"TO" PULSE
"FRO" PULSE
"FRO" TEST PULSE
T_o
0° "TO"
0° "FRO"
t
T_t
T_m
REF TIME
SCAN MIDPOINT

FIGURE 7. AZIMUTH ANGLE SCAN TIMING (NOT TO SCALE)

(B) *Azimuth angle encoding.* Each guidance angle transmitted must consist of a clockwise TO scan followed by a counterclockwise FRO scan as viewed from above the antenna. For Approach Azimuth functions, increasing angle values must be in the direction of the TO scan, for the Back Azimuth function, increasing angle values must be in the direction of the FRO scan. The antenna has a narrow beam in the plane of the scan direction and a broad beam in the orthogonal plane which fills the vertical coverage. Zero angle must be defined along the midpoint of the proportional sector.

(C) *Elevation angle encoding.* The radiation from elevation equipment must produce a beam which scans from the horizon up to the highest elevation angle and then scans back down to the horizon. The antenna has a narrow beam in the plane of the scan direction and a broad beam in the orthogonal plane which fills the horizontal coverage. Elevation angles are defined from the horizonal plane containing the antenna phase center; positive angles are above the horizontal and zero angle is along the horizontal.

(iv) *Clearance guidance.* The timing of the clearance pulses must be in accordance with figure 8. For azimuth elements with proportional coverage of less than ±40 degrees, clearance guidance information must be provided by transmitting pulses in a TO and FRO format adjacent to the stop/start times of the scanning beam signal. The fly right clearance pulses must represent positive angles and the fly left clearance pulses must represent negative angles. The duration of each clearance pulse must be 50 microseconds with a tolerance of ±5 microseconds. The transmitter switching time between the clearance pulses and the scanning beam transmissions must not exceed 10 microseconds. The rise time at the edge of each clearance pulse must be less than 10 microseconds. In the right clearance guidance sector, the transmitted fly right clearance pulses must exceed the transmitted fly left clearance pulses by more than 15 dB and must exceed the sidelobes of the scanning beam signal by at least 5 dB. The fly right clearance pulses must be at least 5 dB below the scanning beam level at the scanning beam positive angle scan limit. The converse applies to the fly left clearance guidance sector. Clearance guidance pulses must be at least 5 dB greater than any other signal in the appropriate clearance sector. Optionally, clearance guidance may be provided by scanning throughout the approach guidance sector. For angles outside the approach azimuth proportional coverage limits as set in Basic Data Word One, proper decode and display of clearance guidance must occur to the limits of the guidance region.


TIME SEPARATION OF SCANNING-BEAM PULSES AT NEGATIVE LIMITS OF SCAN *
WIDTH OF PROPORTIONAL GUIDANCE SECTOR
TIME SEPARATION OF SCANNING-BEAM PULSES AT POSITIVE LIMITS OF SCAN. *
"TO" SCAN TIME SLOT
"FRO" SCAN TIME SLOT
0°
MIDSCAN POINT
0°
LEGEND
FLY-LEFT * CLEARANCE PULSES
FLY-RIGHT * CLEARANCE PULSES
SCANNING BEAM PULSES

*Angle signs and clearance conventions are reversed for Back Azimuth.

FIGURE 8. CLEARANCE PULSE TIMING FOR AZIMUTH FUNCTIONS

229

(3) *Data Function Format.* Basic data words provide equipment characteristics and certain siting information. Basic data words must be transmitted from an antenna located at the approach azimuth or back azimuth site which provides coverage throughout the appropriate sector. Data function timing must be in accordance with Table 7 as follows:

TABLE 7—BASIC DATA FUNCTION TIMING

Event	Event time slot begins at:[1]	
	15.625 kHz clock pulse (number)	Time (milliseconds)
Preamble	0	0
Data transmission (bits I_{13}-I_{30})	25	1.600
Parity Transmission (bits I_{31}-I_{32})	43	2.752
End function (airborne)	45	2.880
End guard time; end function (ground)		3.100

[1] The previous event time slot ends at this time.

(i) *Preamble.* Must be in accordance with requirements of paragraph (i)(1) of this section.

(ii) *Data transmissions.* Basic data must be transmitted using DPSK modulation. The content and repetition rate of each basic data word must be in accordance with Table 8. For data containing digital information, binary number 1 must represent the lower range limit with increments in binary steps to the upper range limit shown in Table 8.

(j) *Basic data word requirement.* Specific basic data word requirements are as follows:

(1) Approach azimuth to threshold distance must represent the distance measured parallel to the runway centerline from the approach azimuth antenna to runway landing threshold.

(2) Approach azimuth proportional coverage limit must represent the limit of the sector in which proportional approach azimuth guidance is provided.

(3) Ground equipment performance level must represent the operational status of the equipment in use. The exact use of this basic data item is not yet defined.

(4) Approach elevation antenna height must represent the height of the elevation antenna phase center relative to the height of the MLS datum point.

(5) Approach elevation antenna offset must represent the minimum distance between the elevation antenna phase center and a vertical plane containing the runway centerline.

(6) Back azimuth next function must indicate that the next function to be transmitted will be back azimuth.

(7) Minimum glidepath must represent the minimum glidepath as defined.

(8) Beamwidth must represent, for a particular function, the antenna beamwidth as defined to the nearest least significant bit provided for in the data word.

(9) Approach azimuth guidance alert must represent the elevation angle in the specified azimuth sector below which guidance is unreliable or unsafe. A binary code "0" on this message element must indicate that all approach azimuth angles in a particular sector are usable.

(10) DME distance must represent the distance measured parallel to the runway centerline from the DME antenna phase center to the MLS datum point.

(11) DME offset must represent the minimum distance between the DME antenna phase center and a vertical plane containing runway centerline.

(12) DME channel must represent the DME channel associated with the selected MLS channel.

(13) Approach azimuth antenna offset must represent the minimum distance between the approach azimuth antenna phase center and a vertical plane containing runway centerline.

(14) MLS ground equipment identification must represent the last 3 characters of the system identification specified in paragraph (i)(2) of this section. The characters must be encoded in accordance with the 5-unit code of the International Telegraph Alphabet No. 2. Even character parity must also be provided.

NOTE: Restriction of data content to alpha characters eliminates the need for transmission of signal numbers 29 and 30 designating letters and figures.

(15) Back azimuth antenna distance must represent the horizontal distance measured parallel to the runway centerline from the back azimuth antenna phase center to the back azimuth reference datum.

(16) Back azimuth proportional coverage limit must represent the limit of the sector in which proportional back azimuth guidance is provided.

(17) DME status must represent the operational status of the equipment in use.

(18) DME or DME/P must represent whether the equipment in use is conventional or precision DME.

(19) MLS datum point to threshold distance must represent the distance measured along the runway centerline from the MLS datum point to the runway threshold.

TABLE 8—BASIC DATA

Word	Data content	Max. time between transmissions (seconds)	Bits used	Range of values	Least significant bit	Bit number
1	PREAMBLE	0.4	12			I_{1}-I_{12}
	Approach azimuth to threshold distance		6	0M to 6300M	100M	I_{13}-I_{18}
	Approach azimuth proportional coverage limit		5	−10° to −60°	2°	I_{19}-I_{23}
	Approach azimuth proportional coverage limit		5	+10° to +60°	2°	I_{24}-I_{28}
	Clearance signal type		1	See note 9		I_{29}
	SPARE		1			I_{30}
	PARITY		2	See note 1		I_{31}-I_{32}
2	PREAMBLE	0.16	12			I_{1}-I_{12}
	Ground equipment performance level		2	See note 2		I_{13}-I_{14}
	Minimum glide-path		6	2° to 8.2°	0.1°	I_{15}-I_{20}
	Back azimuth next function		1	See note 3		I_{21}
	SPARE		7	See note 6		I_{22}-I_{28}
	DME Status		2	See note 2		I_{29}-I_{30}
	PARITY		2	See note 1		I_{31}-I_{32}
3	PREAMBLE	10	12			I_{1}-I_{12}
	Approach azimuth beamwidth		3	0.5° to 4°	0.5°	I_{13}-I_{15}
	Approach elevation beamwidth		3	0.5° to 2.5°	0.5°	I_{16}-I_{18}
	Flare elevation beamwidth		2	0.5° to 1°	0.25°	I_{19}-I_{20}
	Approach azimuth sector guidance alert:					
	−60° to −20°		3	1° to 8°	1°	I_{21}-I_{23}
	−20° to −5°		2	1° to 4°	1°	I_{24}-I_{25}
	+20° to +5°		2	1° to 4°	1°	I_{26}-I_{27}
	+60° to +20°		3	1° to 8°	1°	I_{28}-I_{30}
	PARITY		2	See note 1		I_{31}-I_{32}
4	PREAMBLE	10	12			I_{1}-I_{12}
	DME distance		12	−8000M to +8000M See note 7	4M	I_{13}-I_{24}
	DME offset		6	−155M to +155M See note 7	5M	I_{25}-I_{30}
	PARITY		2	See note 1		I_{31}-I_{32}
5	PREAMBLE	10	12			I_{1}-I_{12}
	Approach azimuth antenna offset		7	−126M to +126M See note 7	2M	I_{13}-I_{19}
	DME or DME/P		1	DME=0; DME/P=1		I_{20}
	DME channel		9	See note 8		I_{21}-I_{29}
	SPARE		1			I_{30}
	PARITY		2	See note 1		I_{31}-I_{32}
6	PREAMBLE	10	12			I_{1}-I_{12}
	MLS ground subsystem identification (See note 4)			Letters A to Z		
	Character 2		6			I_{13}-I_{18}
	Character 3		6			I_{19}-I_{24}
	Character 4		6			I_{25}-I_{30}
	PARITY		2	See note 1		I_{31}-I_{32}
7	PREAMBLE	1	12	See note 5		I_{1}-I_{12}

TABLE 8—BASIC DATA—Continued

Word	Data content	Max. time between transmissions (seconds)	Bits used	Range of values	Least significant bit	Bit number
	Ground equipment performance level		2	See note 2		I_{13}-I_{14}
	Back azimuth antenna distance		5	OM to 3100M	100M	I_{15}-I_{19}
	Back azimuth proportional coverage limit		4	−10° to −40°	2°	I_{20}-I_{23}
	Back azimuth proportional coverage limit		4	+10° to +40°	2°	I_{24}-I_{27}
	Back azimuth beamwidth		2	1° to 4°	1°	I_{28}-I_{29}
	SPARE		1			I_{30}
	PARITY		2	See note 1		I_{31}-I_{32}
8	PREAMBLE	10	12			I_{1}-I_{12}
	Elevation antenna height		6	−1M +5.2M See note 7	0.2M	I_{13}-I_{18}
	Elevation antenna offset		5	−150M to +150M See note 7	10M	I_{19}-I_{23}
	MLS datum point to threshold distance		7	OM to 630M	5M	I_{24}-I_{30}
	PARITY		2	See note 1		I_{31}-I_{32}

NOTE 1. Parity chocks that there is an even number of ones in Bits I_{13} to I_{30} and obeys the equations:

$I_{13}+I_{14}\ \ldots\ +I_{29}+I_{30}+I_{31}=$ EVEN
$I_{14}+I_{16}+I_{18}\ \ldots\ +I_{28}+I_{30}+I_{32}=$ EVEN

NOTE 2. Coding not yet defined. Transmit all zeros.

NOTE 3. Code for I_{21} is:

C = No back azimuth transmission.
1 = Back azimuth transmission to follow.

NOTE 4. Data word 6 is transmitted for both approach azimuth and back azimuth coverages alternately and at the 10-second maximum time between transmissions for each coverage sector, if back azimuth guidance is provided.

NOTE 5. Data word 7 is transmitted from the back azimuth equipment.

NOTE 6. These bits are reserved for future applications requiring high transmission rates. Transmit all zeros.

NOTE 7. The convention for the coding of negative numbers is as follows:

MSB is the sign bit:
0 = +
1 = −

Other bits represent the absolute value.

The convention for the antenna location is as follows: as viewed from the MLS approach reference datum looking toward the MLS datum point, a positive number shall represent a location to the right of the runway centre line (lateral offset) or above the runway (vertical offset) or toward the stop end of the runway (Longitudinal distance).

NOTE 8. Coding not yet defined. 9 bits provide the capability to encode frequency and mode separately. Transmit all zeros.

NOTE 9. Code for I_{29} is:

0 = Pulse clearance signal.
1 = Scanning clearance signal.

(Secs. 305, 307, 313(a), 601, 606, Federal Aviation Act of 1958, as amended (49 U.S.C. 1343, 1348, 1354(a), 1421, 1426) (49 U.S.C. 106(g); revised, Pub. L. 97-449, Jan. 12, 1983))

[Doc. No. 20669, 46 FR 61566, Dec. 17, 1981; 47 FR 46200, Oct. 18, 1982; 47 FR 47808, Oct. 28, 1982, as amended at 49 FR 15545, Apr. 19, 1984]

§ 171.313 Azimuth performance requirements.

This section prescribes the performance requirements for the azimuth equipment of the MLS as follows:

(a) *Approach azimuth coverage requirements.* The approach azimuth equipment must provide guidance information in at least the following volume of space (see Figure 9).

(1) Horizontally within a sector plus or minus 40 degrees about the runway centerline originating at the datum point and extending in the direction of the approach to 20 nautical miles from the runway threshold. The minimum proportional guidance sector must be plus or minus 10 degrees about the runway centerline. Clearance signals must be used to provide the balance of the required coverage, where the proportional sector is less than plus or minus 40 degrees. When intervening obstacles prevent full coverage, the ±40° guidance sector can be reduced as required.

(2) Vertically between:

(i) A conical surface originating 2.5 meters (8 feet) above the runway centerline at threshold inclined at 0.9 degree above the horizontal, and

(ii) A conical surface originating at the azimuth ground equipment antenna inclined at 15 degrees above the horizontal to a height of 6,000 meters (20,000 feet).

(iii) Where intervening obstacles penetrate the lower surface, coverage need be provided only to the minimum line of sight.

(3) Runway region.

(i) Proportional guidance horizontally within a sector 45 meters (150 feet) each side of the runway centerline beginning at the stop end and extending parallel with the runway centerline in the direction of the approach to join the approach region. This requirement does not apply to azimuth offset installations.

(ii) Vertically between a horizontal surface which is 2.5 meters (8 feet) above the farthest point of runway centerline which is in line of sight of the azimuth antenna, and, a conical surface originating at the azimuth ground equipment antenna inclined at 20 degrees above the horizontal up to a height of 600 meters (2,000 feet). This requirement does not apply to azimuth offset installations.

(4) Within the approach azimuth coverage sector defined in paragraph (a) (1), (2) and (3) of this section, the power densities must not be less than those shown in Table 9 but the equipment design must also allow for:

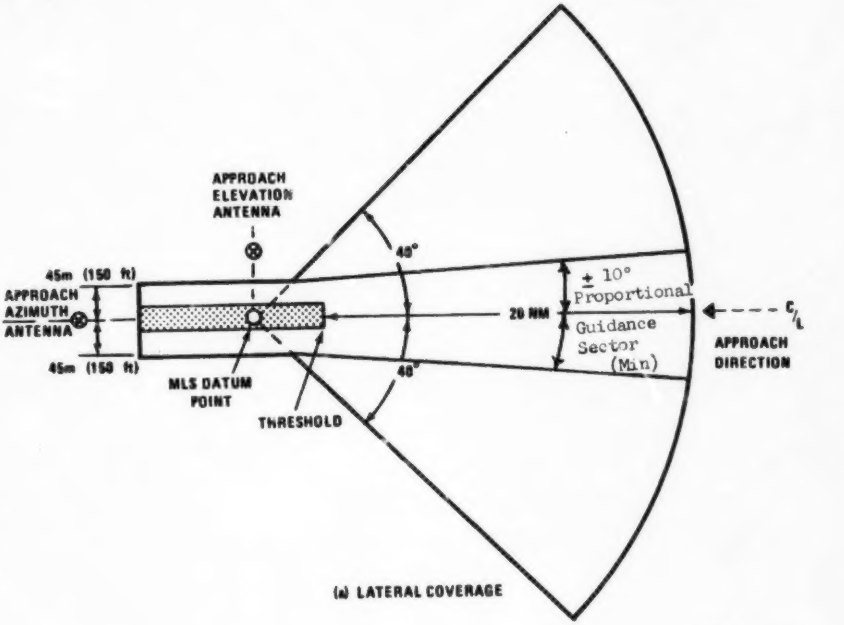
(i) Transmitter power degradation from normal by −1.5 dB;

(ii) Rain loss of −2.2 dB at the longitudinal coverage extremes.

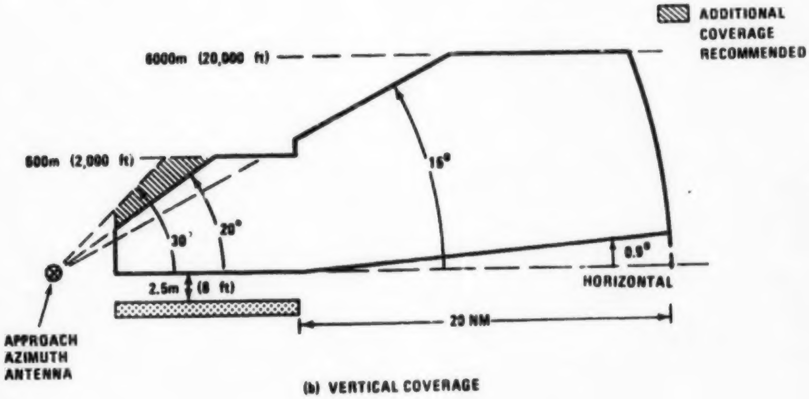
(b) *Siting requirements.* The approach azimuth antenna system must, except as allowed in paragraph (c) of this section:

(1) Be located on the extension of the centerline of the runway beyond the stop end;

(2) Be adjusted so that the zero degree azimuth plane will be a vertical plane which contains the centerline of the runway served;


APPROACH ELEVATION ANTENNA
45m (150 ft)
APPROACH AZIMUTH ANTENNA
45m (150 ft)
MLS DATUM POINT
THRESHOLD
40°
40°
20 NM
± 10° Proportional Guidance Sector (Min)
C/L
APPROACH DIRECTION

(a) LATERAL COVERAGE


ADDITIONAL COVERAGE RECOMMENDED
6000m (20,000 ft)
600m (2,000 ft)
15°
30°
20°
0.9°
HORIZONTAL
2.5m (8 ft)
20 NM
APPROACH AZIMUTH ANTENNA

(b) VERTICAL COVERAGE

FIGURE 9. APPROACH AZIMUTH COVERAGE

TABLE 9—AZIMUTH POWER DENSITY REQUIREMENTS (dBW/m²)

Function	DPSK	Clearance	Antenna beamwidth (3dB)		
			1°	2°	3°
Approach azimuth	-89.5	-88	-88	-85.5	-82
High rate approach azimuth	-89.5	-88	-88	-88	-86.8
Back azimuth	-81	-79.5	-79.5	-77	-73.5

(3) Have the minimum height necessary to comply with the coverage requirements prescribed in paragraph (a) of this section;

(4) Be located at a distance from the stop end of the runway that is consistent with safe obstruction clearance practices;

(5) Not obscure any light of an approach lighting system; and

(6) Be installed on frangible mounts or beyond the 300 meter (1,000 feet) light bar.

(c) On runways where limited terrain prevents the azimuth antenna from being positioned on the runway centerline extended, and the cost of the land fill or a tall tower antenna support is prohibitive, the azimuth antenna may be offset. If an offset azimuth antenna is used, the criteria in Subpart C of Part 97 (TERPS) of this chapter is applicable. Incorporated by reference is United States Standard for Terminal Instrument Procedures (TERPS), FAA Handbook AOP 8260.3 through change 3, dated June 3, 1980, which prescribes standardized methods for use in designing instrument flight procedures. It is available from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 and also available for inspection at the Office of the Federal Register Information Center, Room 8301, 1100 L Street, N.W., Washington, D.C. 20408.

(d) *Antenna coordinates.* The scanning beams transmitted by the approach azimuth equipment within ±40° of the centerline may be either conical or planar.

(e) *Approach azimuth accuracy.* (1) The system and subsystem accuracies shown in Table 10 and the associated notes are required at the approach reference datum. From this point accuracy degradations must not exceed the following limits:

(i) *With distance.* The system PFE limit and PFN limit, expressed in angular terms at 20 nautical miles from the runway threshold along the extended runway centerline at the lower coverage limit is the lesser of either 2 times the value specified at the approach reference datum or 0.3 degrees. The CMN limits expressed in angular terms at 10 nautical miles from the reference datum along the extended runway centerline is 1.3 times the value specified at the approach reference datum or 0.1 degree, whichever is less.

(ii) *With azimuth angle.* The system PFE limit and PFN limit, expressed in angular terms at plus or minus 40 degrees azimuth angle is 1.5 times the value on the extended runway centerline at the same distance from the approach reference datum. The CMN limit, expressed in angular terms at plus or minus 40 degrees azimuth angle is 1.3 times the value on the extended runway centerline at the same distance from the approach reference datum.

(iii) *With elevation angle.* The system PFE and PFN limit, do not degrade from the lower coverage limit up to an elevation angle of 9 degrees. The system PFE limit or PFN limit expressed in angular terms at an elevation angle of 15 degrees from the approach azimuth antenna phase center is 2 times the value permitted below 9 degrees at the same distance from the approach reference datum and the same azimuth angle. The CMN limit does not degrade with elevation angle.

(2) The system and ground subsystem accuracies shown in Table 10 are to be demonstrated at commissioning as maximum error limits. Subsequent to commissioning, the accuracies are considered to be the 95% probability limits.

TABLE 10—APPROACH AZIMUTH ACCURACIES AT THE APPROACH REFERENCE DATUM

Error type	System	Angular error (degrees)	
		Ground subsystem	Airborne[5] subsystem
PFE	±20 ft.[1][2] (6.1m)	±10 ft.[3]	±0.017
CMN	±10.5 ft (3.2m)[1][4]	±0.030	±0.015

NOTES:

[1] Includes errors due to ground and airborne equipment and propagation effects.

[2] The system PFN component must not exceed ±3.5 meters (11.5 feet).

[3] The equivalent angular error must not exceed 0.12°.

[4] The system control motion noise must not exceed 0.1°.

[5] The airborne subsystem angular errors are provided for information only.

(f) Approach azimuth antenna characteristics are as follows:

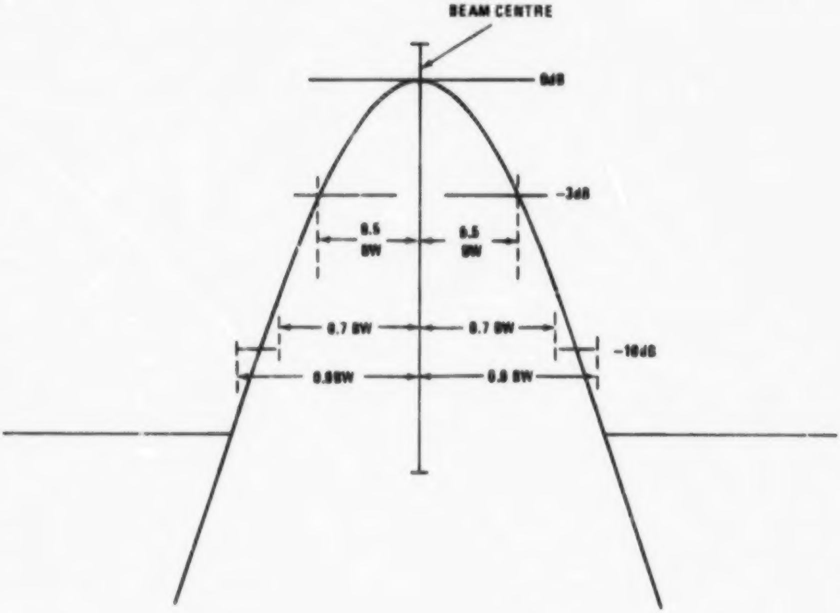
(1) *Drift.* Any azimuth angle as encoded by the scanning beam at any point within the proportional coverage sector must not vary more than ±0.07 degree over the range of service conditions specified in § 171.309(d) without the use of internal environmental controls. Multipath effects are excluded from this requirement.

(2) *Beam pointing errors.* The azimuth angle as encoded by the scanning beam at any point within ±0.5 degree of the zero degree azimuth must not deviate from the true azimuth angle at that point by more than ±0.05 degree. Multipath and drift effects are excluded from this requirement.

(3) *Antenna alignment.* The antenna must be equipped with suitable optical, electrical or mechanical means or any combination of the three, to bring the zero degree azimuth radial into coincidence with the approach reference datum with a maximum error of 0.02 degree. Additionally, the azimuth antenna bias adjustment must be electronically steerable at least to the monitor limits in steps not greater than 0.01 degree.

(4) *Antenna far field patterns in the plane of scan.* On boresight, the azimuth antenna mainlobe pattern must conform to Figure 10, and the beamwidth must be such that, in the installed environment, no significant lateral reflections of the mainlobe exist along the approach course. In any case the beamwidth must not exceed three degrees. Anywhere within coverage the −3dB width of the antenna mainlobe, while scanning normally, must not be less than 25 microseconds (0.5 degree) or greater than 250 microseconds (5 degrees). The antenna mainlobe may be allowed to broaden from the value at boresight by a factor of 1/cos ϕ, where ϕ is the angle off boresight. The sidelobe levels must be as follows:

(i) *Dynamic sidelobe levels.* With the antenna scanning normally, the dynamic sidelobe level that is detected by a receiver at any point within the proportional coverage sector must be down at least 10dB from the peak of the main beam. Outside the coverage sector, the radiation from the scanning beam antenna must be of such a nature that receiver warnings will not be removed or suitable OCI signals must be provided.


BEAM CENTRE
0dB
-3dB
0.5 BW
0.5 BW
0.7 BW
0.7 BW
-10dB
0.8BW
0.8 BW

NOTES: THE BEAM ENVELOPE IS SMOOTHED BY A 26 kHz VIDEO FILTER BEFORE MEASUREMENT.
BW=BEAMWIDTH.

FIGURE 10. FAR FIELD DYNAMIC SIGNAL IN SPACE

(ii) *Effective sidelobe levels.* With the antenna scanning normally, the sidelobe levels in the plane of scan must be such that, in the installed environment, errors contributed by sidelobe reflections will not exceed the angular equivalent of 9 feet at the approach reference datum over the required range of aircraft approach speeds.

(5) *Antenna far field pattern in the vertical plane.* The azimuth antenna free space radiation pattern below the horizon must have a slope of at least −8dB/degree at the horizon and all sidelobes below the horizon must be at least 13 dB below the pattern peak. The antenna radiation pattern above the horizon must satisfy both the system coverage requirements and the spurious radiation requirement.

(6) *Data antenna.* The data antenna must have horizontal and vertical patterns as required for its function.

(g) *Back azimuth coverage requirements.* The back azimuth equipment where used must provide guidance information in at least the following volume of space (see Figure 11):

(1) Horizontally within a sector plus or minus 20 degrees about the runway centerline originating at the back azimuth ground equipment antenna and extending in the direction of the missed approach at least to 5 nautical miles from the runway stop end. The minimum proportional guidance sector must be ±10 degrees about the runway centerline. Clearance signals must be used to provide the balance of the required coverage where the proportional sector is less than ±20 degrees.

(2) Vertically in the runway region between:

(i) A horizontal surface 2.5 meters (8 feet) above the farthest point of runway centerline which is in line of sight of the azimuth antenna, and,

(ii) A conical surface originating at the azimuth ground equipment antenna inclined at 20 degrees above the horizontal up to a height of 600 meters (2000 feet).

(3) Vertically in the back azimuth region between:

(i) A conical surface originating 2.5 meters (8 feet) above the runway stop end, inclined at 0.9 degree above the horizontal, and,

(ii) A conical surface originating at the missed approach azimuth ground equipment antenna, inclined at 15 degrees above the horizontal up to a height of 1500 meters (5000 feet).

(iii) Where obstacles penetrate the lower coverage limits, coverage need be provided only to minimum line of sight.

(4) Within the back azimuth coverage sector defined in paragraph (g)(1), (2), and (3) of this section, the power densities must not be less than those shown in table 9, but the equipment design must also allow for:

(i) Transmitter power degradation from normal by −1.5 dB.

(ii) Rain loss of −2.2 dB at the longitudinal coverage extremes.

(h) *Back azimuth siting.* The back azimuth equipment antenna must:

(1) Normally be located on the extension of the runway centerline at the threshold end;

(2) Be adjusted so that the vertical plane containing the zero degree course line contains the back azimuth reference datum;

(3) Have minimum height necessary to comply with the course requirements prescribed in paragraph (g) of this section;

(4) Be located at a distance from the threshold end that is consistent with safe obstruction clearance practices;

(5) Not obstruct any light of an approach lighting system; and

(6) Be installed on frangible mounts or beyond the 300 meter (1,000 feet) light bar.

(i) *Back azimuth antenna coordinates.* The scanning beams transmitted by the back azimuth equipment may be either conical or planar.

(j) *Back azimuth accuracy.* The requirements specified in paragraph (e) of this section apply except for the degradation allowance which must not exceed the following:

(1) *With distance.* The system PFE limit and PFN limit, expressed in angular terms at the maximum range and lower limit of coverage along the extended runway centerline is the lesser of either 2 times the value specified at the back azimuth reference datum or 0.6 degree. The CMN limit,

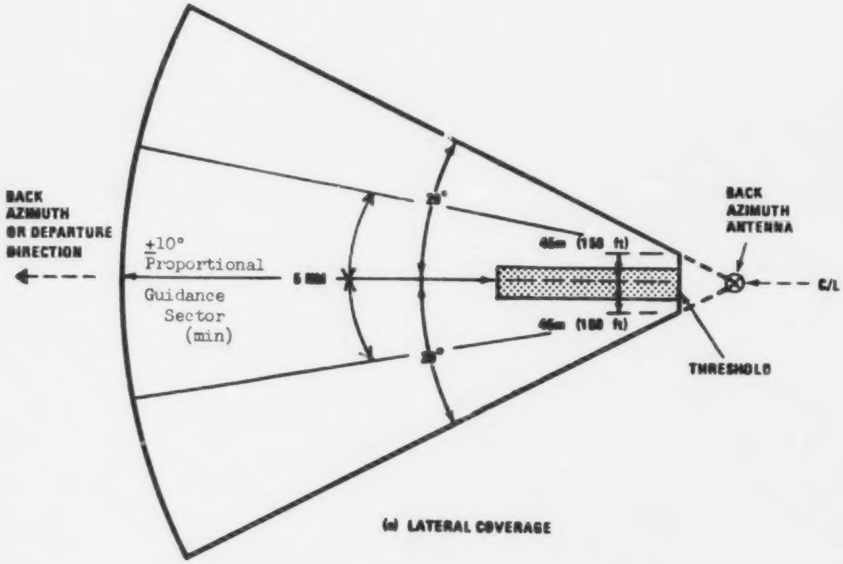
expressed in angular terms at 7.5 nautical miles from the runway stop end along the extended runway centerline is 1.3 times the value specified at the back azimuth reference datum.

(2) *With azimuth angle.* The system PFE limit and PFN limit, expressed in angular terms at plus or minus 20 degree azimuth angle is 1.5 times the value on the extended runway centerline at the same distance from the back azimuth reference datum. The CMN limit, expressed in angular terms at plus or minus 20 degrees azimuth angle is 1.3 times the value on the extended runway centerline at the same distance from the back azimuth reference datum.

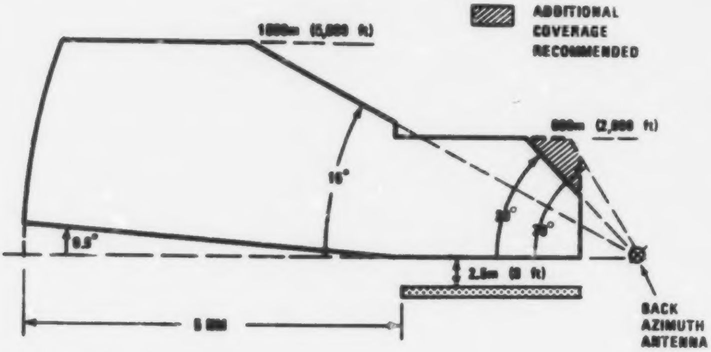
(3) *With elevation angle.* The system PFE limit and PFN limit do not degrade from the lower coverage limit up to an elevation angle of 9 degrees. The system PFE limit or PFN limit expressed in angular terms at an elevation angle of 15 degrees from the back azimuth antenna phase center is 2 times the value permitted below 9 degrees at the same distance from the back azimuth reference datum and the same azimuth angle. The CMN limit does not degrade with elevation angle.

(k) *Back azimuth antenna characteristics.* The requirements specified in paragraph (f) of this section apply.

(l) *Scanning conventions.* Figure 12 shows the approach azimuth and back azimuth scanning conventions.

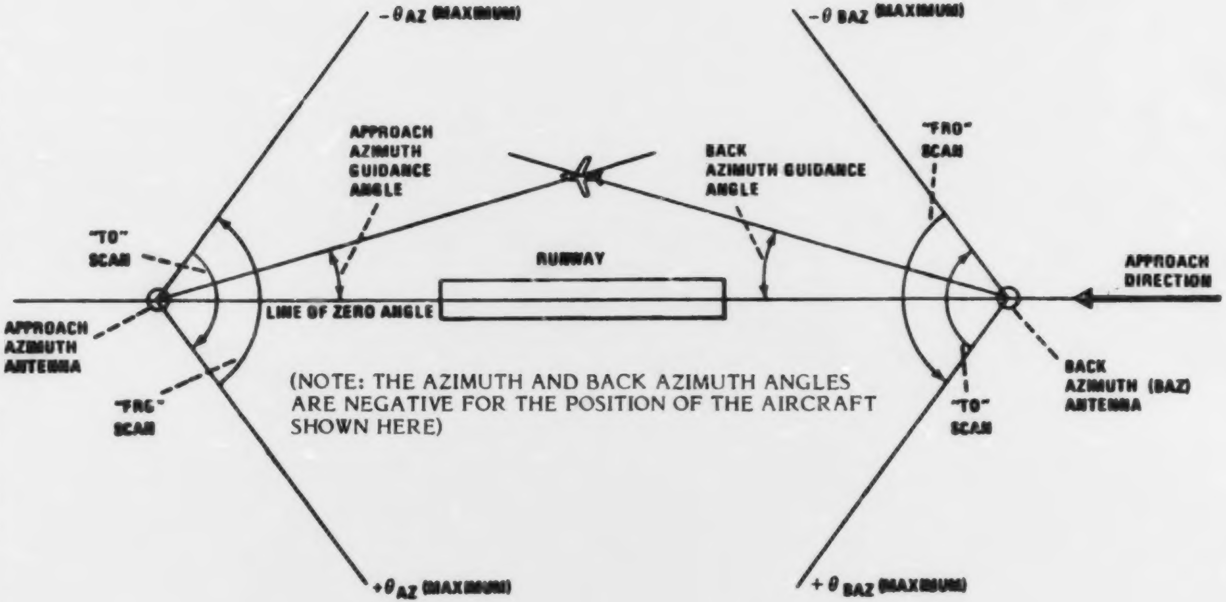

BACK AZIMUTH OR DEPARTURE DIRECTION
±10° Proportional Guidance Sector (min)
5 NM
20°
45m (150 ft)
45m (150 ft)
20°
BACK AZIMUTH ANTENNA
C/L
THRESHOLD

(a) LATERAL COVERAGE


1500m (5,000 ft)
ADDITIONAL COVERAGE RECOMMENDED
600m (2,000 ft)
15°
30°
20°
0.9°
2.5m (8 ft)
5 NM
BACK AZIMUTH ANTENNA

(b) VERTICAL COVERAGE

FIGURE 11. BACK AZIMUTH COVERAGE


$-\theta_{AZ}$ (MAXIMUM)
$-\theta_{BAZ}$ (MAXIMUM)
APPROACH AZIMUTH GUIDANCE ANGLE
BACK AZIMUTH GUIDANCE ANGLE
"FRO" SCAN
"TO" SCAN
RUNWAY
APPROACH DIRECTION
LINE OF ZERO ANGLE
APPROACH AZIMUTH ANTENNA
BACK AZIMUTH (BAZ) ANTENNA
"FRO" SCAN
"TO" SCAN
$+\theta_{AZ}$ (MAXIMUM)
$+\theta_{BAZ}$ (MAXIMUM)

(NOTE: THE AZIMUTH AND BACK AZIMUTH ANGLES ARE NEGATIVE FOR THE POSITION OF THE AIRCRAFT SHOWN HERE)

FIGURE 12. AZIMUTH GUIDANCE FUNCTIONS SCANNING CONVENTIONS

241

[Doc. No. 20669, 46 FR 61566, Dec. 17, 1981; 47 FR 46267, Oct. 18, 1982]

§ 171.315 Azimuth monitor system requirements.

(a) The approach azimuth or back azimuth monitor system must cause the radiation to cease and a warning must be provided at the designated control point if any of the following conditions persist for longer than the periods specified:

(1) There is a change in the ground equipment contribution to the mean course error component such that the path following error at the reference datum or in the direction of any azimuth radial, exceeds the limits specified in § 171.313(e)(1) or § 171.313(j) for a period of more than one second.

(2) There is a reduction in the radiated power to a level not less than that specified in § 171.313(a)(4) or § 171.313(g)(4) for a period of more than one second.

(3) There is an error in the preamble DPSK transmissions which occurs more than once in any one second period.

(4) The timing standards specified in Table 11 are exceeded for a period of more than one second.

(5) There is an error in the time division multiplex synchronization of a particular azimuth function such that the requirement specified in § 171.311(e) is not satisfied and if this condition persists for more than one second.

(6) A failure of the monitor is detected.

TABLE 11—SIGNAL FORMAT TIMING TOLERANCES

Signal format item	Timing tolerance
Clearance and OCI signals	As specified ± 2 μsec.
DPSK phase transitions	As specified ± 2 μsec.
TO-FRO scan timing (internal to scan)	As required to meet accuracy specs.

NOTE 1.—The tolerances shown apply to the timing of the specific events as shown in Tables 2, 4a, 4b, 5 and 7.

NOTE 2.—The timing jitter relative to the specified value plus the tolerance above, must be less than 1 μsec rms.

(b) The period during which erroneous guidance information is radiated must not exceed the periods specified in § 171.315(a). If the fault is not cleared within the time allowed, the ground equipment must be shutdown. After shutdown, no attempt must be made to restore service until a period of 20 seconds has elapsed.

§ 171.317 Approach elevation performance requirements.

This section prescribes the performance requirements for the elevation equipment components of the MLS as follows:

(a) *Elevation coverage requirements.* The approach elevation facility must provide proportional guidance information in at least the following volume of space (see Figure 13):

(1) Laterally within a sector originating at the datum point which is at least equal to the proportional guidance sector provided by the approach azimuth ground equipment.

(2) Longitudinally from 75 meters (250 feet) from the datum point to 20 nautical miles from threshold in the direction of the approach.

(3) Vertically within the sector bounded by:

(i) A surface which is the locus of points 2.5 meters (8 feet) above the runway surface;

(ii) A conical surface originating at the datum point and inclined 0.9 degree above the horizontal and,

(iii) A conical surface originating at the datum point and inclined at 7.5 degrees above the horizontal up to a height of 6000 meters (20,000 feet).

Where the physical characteristics of the approach region prevent the achievement of the standards under paragraphs (a) (1), (2), and (3) of this section, guidance need not be provided below a conical surface originating at the elevation antenna and inclined 0.9 degree above the line of sight.

(4) Within the elevation coverage sector defined in paragraphs (a) (1), (2), and (3) of this section, the power densities must not be less than those shown in Table 12, but the equipment design must also allow for:

(i) Transmitter power degradation from normal by −1.5dB.

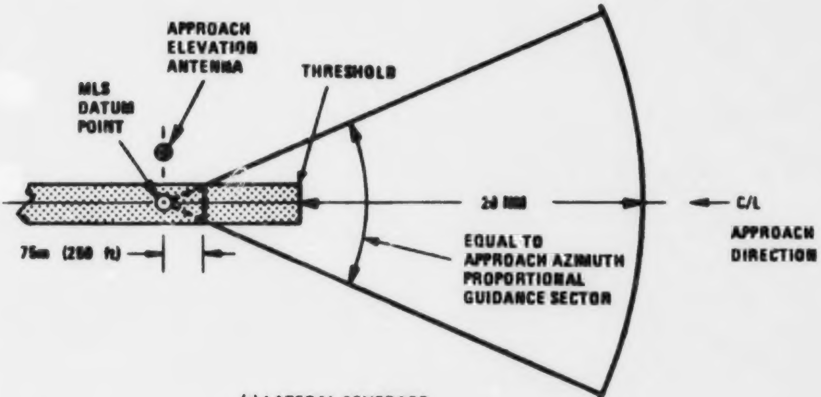
(ii) Rain loss of −2.2dB at the coverage extremes.

(b) *Elevation siting requirements.* The elevation antenna system must:

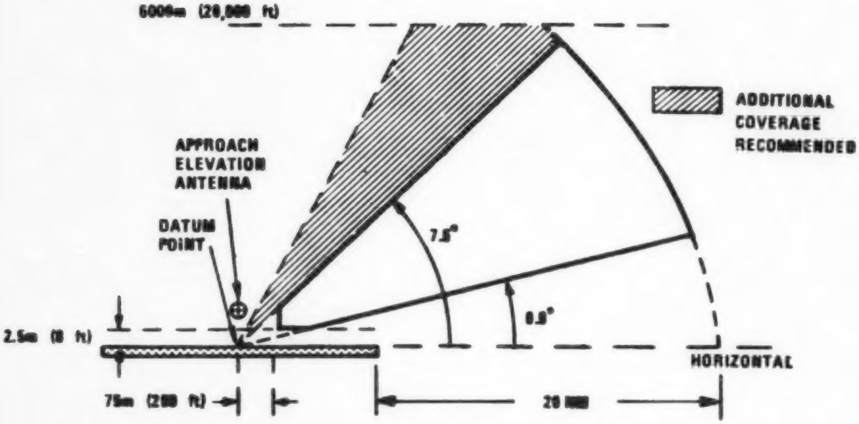
(1) Be located within 150 meters (500 feet) of runway centerline.

(2) Be located near runway threshold such that the minimum glidepath planar angle with respect to the antenna phase center and the horizontal plane crosses runway threshold at a height between 15 and 18 meters (50 and 60 feet).

(i) For STOL operations using minimum glidepaths of greater than 4°, this height may be as low as 12 meters (35 feet).


APPROACH ELEVATION ANTENNA
THRESHOLD
MLS DATUM POINT
20 NM
C/L
APPROACH DIRECTION
EQUAL TO APPROACH AZIMUTH PROPORTIONAL GUIDANCE SECTOR
75m (250 ft)

(a) LATERAL COVERAGE


6000m (20,000 ft)
ADDITIONAL COVERAGE RECOMMENDED
APPROACH ELEVATION ANTENNA
DATUM POINT
7.5°
0.9°
2.5m (8 ft)
HORIZONTAL
75m (250 ft)
20 NM

(b) VERTICAL COVERAGE

FIGURE 13. APPROACH ELEVATION COVERAGE

(3) Satisfy obstacle clearance criteria specified in Subpart C of Part 97 of this chapter.

(c) *Antenna coordinates.* The scanning beams transmitted by the elevation subsystem must be conical.

TABLE 12—ELEVATION POWER DENSITY REQUIREMENTS (dBW/m ²)

DPSK	Antenna beamwidth (3dB)	
	1°	2°
−89.5	−88.0	−88.0

TABLE 13—ELEVATION ACCURACIES AT THE APPROACH REFERENCE DATUM

Error type	System	Angular error (degrees)	
		Ground subsystem	Airborne [4] subsystem
PFE	±2.0 ft.[1] (0.6m)[2]	[3] 0.093	0.017
CMN	±.75 ft. (0.23m)[1].	0.020	0.010

[1] Angular error calculations assume the following: 262 meters (861 feet) antenna to reference datum. Distance calculation assumed 15 meters (50 feet) threshold crossing on 3° glidepath, 3 meters (10 feet) antenna phase center height and a 122 meters (400) feet antenna offset from runway centerline. Elevation equipment sited to provide a minimum glidepath higher than 3° must provide angular accuracies no less than those specified for equipment sited for a 3° minimum glidepath.

[2] The system PFN component must not exceed ±0.4 meter (1.3 feet).

[3] The mean glidepath error component contributed by the ground equipment must not exceed ±0.3 meters (1 foot).

[4] The airborne subsystem angular errors are provided for information only.

(d) *Elevation accuracy.* (1) The accuracies shown in Table 13 are required at the approach reference datum. From this point, the degradation limits must not exceed the following:

(i) With distance—The system PFE limit and PFN limit, expressed in angular terms at 20 nautical miles from the runway threshold on the minimum glidepath is 0.2 degree. The CMN limit, expressed in angular terms at 10 nautical miles from the reference datum on the minimum glidepath is 1.3 times the value specified at the approach reference datum.

(ii) With azimuth angle—The system PFE limit and PFN limit expressed in angular terms at plus or minus 40 degrees azimuth angle is 1.3 times the value on the extended runway centerline at the same distance from the approach reference datum. The CMN limit, expressed in angular terms at plus or minus 40 degrees azimuth angle is 1.3 times the value on the extended runway centerline at the same distance from the approach reference datum.

(iii) With elevation angle—For elevation angles above the minimum glidepath or 3 degrees, whichever is less and up to the maximum of the proportional guidance coverage and at the locus of points directly above the approach reference datum the system PFE limit, PFN limit and CMN limit expressed in angular terms is allowed to degrade linearly such that at an elevation angle of 15 degrees the limit is 2 times the value specified at the reference datum. In no case will the CMN directly above the reference datum exceed plus or minus 0.07 degree. For other regions of coverage within the angular sector from an elevation angle equivalent to the minimum glidepath up to the maximum angle of proportional coverage the degradations with distance and azimuth angle specified in paragraph (d)(1) (i) and (ii) of this section apply.

(iv) For elevation angles below 60 percent of the minimum glidepath and down to the limit of coverage and at the locus of points directly below the approach reference datum the system PFE limit, the PFN limit and the CMN limit expressed in angular terms, is allowed to increase linearly to 6 times the value at the approach reference datum. For other regions of coverage within the angular sector from an elevation angle equivalent to 60 percent of the minimum glidepath value, and down to the limit of coverage, the degradations with distance and azimuth angle specified in paragraph (d)(1) (i) and (ii) of this section apply. In no case will the PFE be allowed to exceed 0.8 degree, or the CMN be allowed to exceed 0.4 degree.

(2) The system and ground subsystem accuracies shown in Table 13 are to be demonstrated at commissioning as maximum error limits. Subsequent to commissioning, the accuracies are to be considered at 95% probability limits.

(e) Elevation antenna chacteristics are as follows:

(1) *Drift.* Any elevation angle as encoded by the scanning beam at any point within the coverage sector must not vary more than 0.04 degree over the range of service conditions specified in § 171.309(d) without the use of internal environmental controls. Multipath effects are excluded from this requirements.

(2) *Beam pointing errors.* The elevation angle as encoded by the scanning beam at any point within the coverage sector must not deviate from the true elevation angle at that point by more than ±0.04 degree for elevation angles from 2.5° to 3.5°. Above 3.5°, these errors may linearly increase to ±0.1 degree at 7.5°. Multipath and drift effects are excluded from this requirements.

(3) *Antenna alignment.* The antenna must be equipped with suitable optical, electrical, or mechanical means or any combination of the three, to align the lowest operationally required glidepath to the true glidepath angle with a maximum error of 0.01 degree. Additionally, the elevation antenna bias adjustment must be electronically steerable at least to the monitor limits in steps not greater than 0.005 degree.

(4) *Antenna far field patterns in the plane of scan.* On the lowest operationally required glidepath, the antenna mainlobe pattern must conform to Figure 10, and the beamwidth must be such that in the installed environment, no significant ground reflections of the mainlobe exist. In any case, the beamwidth must not exceed 2 degrees. The antenna mainlobe may be allowed to broaden from the value at boresight by a factor of $1/\cos \phi$, where ϕ is the angle off boresight. Anywhere within coverage, the 3dB width of the antenna mainlobe, while scanning normally, must not be less than 25 microseconds (0.5 degree) or greater than 250 microseconds (5 degrees). The sidelobe levels must be as follows:

(i) *Dynamic sidelobe levels.* With the antenna scanning normally, the dynamic sidelobe levels that is detected by a receiver at any point within the proportional coverage sector must be down at least 10 dB from the peak of the mainlobe. Outside the proportional coverage sector, the radiation from the scanning beam antenna must be of such a nature that receiver warnings will not be removed or a suitable OCI signal must be provided.

(ii) *Effective sidelobe levels.* With the antenna scanning normally, the sidelobe levels in the plane of scan must be such that, when reflected from the ground, the resultant angular errors along any glidepath do not exceed 0.09 degree.

(5) *Antenna far field pattern in the horizontal plane.* The horizontal pattern of the antenna must gradually deemphasize the signal away from antenna boresight. Typically, the horizontal pattern should be reduced by at least 3 dB at 20 degrees off boresight and by at least 6 dB at 40 degrees off boresight. Depending on the actual multipath conditions, the horizontal radiation patterns may require more or less deemphasis.

(6) *Data antenna.* The data antenna must have horizontal and vertical patterns as required for its function.

[Doc. No. 20669, 46 FR 61566, Dec. 17, 1981; 47 FR 46269, Oct. 18, 1982]

§ 171.319 Approach elevation monitor system requirements.

(a) The monitor system must act to ensure that any of the following conditions do not persist for longer than the periods specified when:

(1) There is a change in the ground component contribution to the mean glidepath error component such that the path following error on any glidepath exceeds the limits specified in § 171.317 (d) for a period of more than one second.

(2) There is a reduction in the radiated power to a level not less than that specified in § 171.317(a)(4) for a period of more than one second.

(3) There is an error in the preamble DPSK transmissions which occurs more than once in any one second period.

(4) The timing standards specified in Table 11 are exceeded for a period of more than one second.

(5) There is an error in the time division multiplex synchronization of a particular elevation function such that the requirement specified in

§ 171.311(e) is not satisfied and this condition persists for more than one second.

(6) A failure of the monitor is detected.

(b) The period during which erroneous guidance information is radiated must not exceed the periods specified in §171.319(a). If the fault is not cleared within the time allowed, radiation shall cease. After shutdown, no attempt must be made to restore service until a period of 20 seconds has elapsed.

§ 171.321 DME and marker beacon performance requirements.

(a) The DME equipment must meet the performance requirements prescribed in Subpart G of this part. This subpart imposes requirements that performance features must comply with International Standards and Recommended Practices, Aeronautical Telecommunications, Vol. I of Annex 10 to ICAO. In addition, this equipment must be sited near the azimuth antenna site and adjusted such that zero range is at the DME antenna. Incorporated by reference is International Standards and Recommended Practices, Aeronautical Telecommunications, Volume I of Annex 10 to ICAO through Amendment 61 dated April 10, 1980 which prescribes applicability of standards and recommended practice for certain forms of equipment for air navigation aids and procedures for air navigation service. It is available from ICAO, Aviation Building, 1080 University Street, Montreal 101, Quebec, Canada, Attention: Distribution Officer and also available for inspection at the Office of the Federal Register Information Center, Room 8301, 1100 L Street, NW., Washington, D.C. 20408.

(b) MLS marker beacon equipment must meet the performance requirements prescribed in Subpart H of this part. This subpart imposes requirements that performance features must comply with International Standards and Recommended Practices, Aeronautical Telecommunications, Vol. I of Annex 10 to ICAO.

§ 171.323 Fabrication and installation requirements.

(a) The MLS facility must be permanent and must be located, constructed, and installed in accordance with best commercial engineering practices, using applicable electric and safety codes and Federal Communications Commission (FCC) licensing requirements and siting requirements of §§ 171.313 (b) and 171.317(b).

(b) The MLS facility components must utilize solid state technology except that traveling wave tube amplifiers (TWTA) may be used. A maximum level of common modularity must be provided along with diagnostics to facilitate maintenance and troubleshooting.

(c) An approved monitoring capability must be provided which indicates the status of the equipment at the site and at a remotely located maintenance area, with monitor capability that provides prealarm of impending system failures. This monitoring feature must be capable of transmitting the status and prealarm over standard phone lines to a remote location. In the event the sponsor requests the FAA to assume ownership of the facility, the monitoring feature must also be capable of interfacing with FAA remote monitoring requirements. This requirement may be complied with by the addition of optional software and/or hardware in space provided in the original equipment.

(d) The mean corrective maintenance time of the MLS equipment must be equal to or less than 0.5 hours with a maximum corrective maintenance time not to exceed 1.5 hours. This measure applies to correction of unscheduled failures of the monitor, transmitter and associated antenna assemblies, limited to unscheduled outage and out of tolerance conditions.

(e) The mean time between failures of the MLS angle system must not be less than 1,500 hours. This measure applies to unscheduled outrage, out-of-tolerance conditions, and failures of the monitor, transmitter, and associated antenna assemblies.

(f) The MLS facility must have a reliable source of suitable primary power, either from a power distribution system or locally generated. Adequate power capacity must be provided for the operation of the MLS as well as the test and working equipment of the MLS.

(g) The MLS facility must have a continuously engaged or floating battery power source for the continued normal operation of the ground station operation if the primary power fails. A trickle charge must be supplied to recharge the batteries during the period of available primary power. Upon loss and subsequent restoration of power, the battery must be restored to full charge within 24 hours. When primary power is applied, the state of the battery charge must not affect the operation of the MLS ground station. The battery must allow continuation of normal operation of the MLS facility for at least 2 hours without the use of additional sources of power. When the system is operating from the battery supply without prime power, the radome de-icers and the environmental system need not operate. The equipment must meet all specification requirements with or without batteries installed.

(h) There must be a means for determining, from the ground, the performance of the system including antenna, both initially and periodically.

(i) The facility must have, or be supplemented by ground, air or landline communications services. At facilities within or immediately adjacent to air traffic control areas, that are intended for use as instrument approach aids for an airport, there must be ground air communications or reliable communications (at least a landline telephone) from the airport to the nearest FAA air traffic control or communication facility. Compliance with this paragraph need not be shown at airports where an adjacent FAA facility can communicate with aircraft on the ground at the airport and during the entire proposed instrument approach procedure. In addition, at low traffic density airports within or immediately adjacent to air traffic control zones or areas, and where extensive delays are not a factor, the requirements of this paragraph may be reduced to reliable communications from the airport to the nearest FAA air traffic control or communications facility. If the adjacent FAA facility can communicate with aircraft during the proposed instrument approach procedure down to the airport surface or at least down to the minimum approach altitude, this would require at least a landline telephone.

(j) The location of the phase centers for all antennas must be clearly marked on the antenna enclosures.

(k) The latitude, longitude and mean sea level elevation of the MLS datum point must be determined by survey with an accuracy of ±3 meters (±10 feet) laterally and ±0.3 meter (±1.0 foot) vertically. The lateral and vertical offsets from the MLS datum point of all antenna phase centers, the back azimuth reference datum (if applicable), and the intersection of runway threshold with runway centerline must be determined with an accuracy of ±0.3 meter (±1.0 foot) laterally and ±0.03 meter (±0.1 foot) vertically. The owner must bear all costs of the survey. The results of this survey must be included in the "operations and maintenance" manual required by § 171.325 of this subpart and will be noted on FAA Form 198 required by § 171.327.

§ 171.325 Maintenance and operations requirements.

(a) The owner of the facility must establish an adequate maintenance system and provide MLS qualified maintenance personnel to maintain the facility at the level attained at the time it was commissioned. Each person who maintains a facility must meet at least the FCC licensing requirements and demonstrate that he has the special knowledge and skills needed to maintain an MLS facility, including proficiency in maintenance procedures and the use of specialized test equipment.

(b) In the event of out of tolerance conditions or malfunctions, as evidenced by receiving two successive pilot reports, the owner must close the facility by ceasing radiation, and issue a "Notice to Airmen" (NOTAM) that the facility is out of service.

(c) The owner must prepare, and obtain approval of, an operations and maintenance manual that sets forth mandatory procedures for operations, periodic maintenance, and emergency maintenance, including instructions on each of the following:

(1) Physical security of the facility.

(2) Maintenance and operations by authorized persons.

(3) FCC licensing requirements for operations and maintenance personnel.

(4) Posting of licenses and signs.

(5) Relations between the facility and FAA air traffic control facilities, with a description of the boundaries of controlled airspace over or near the facility, instructions for relaying air traffic control instructions and information, if applicable, and instructions for the operation of an air traffic advisory service if the facility is located outside of controlled airspace.

(6) Notice to the Administrator of any suspension of service.

(7) Detailed and specific maintenance procedures and servicing guides stating the frequency of servicing.

(8) Air-ground communications, if provided, expressly written or incorporating appropriate sections of FAA manuals by reference.

(9) Keeping the station logs and other technical reports, and the submission of reports required by § 171.327.

(10) Monitoring of the MLS facility.

(11) Inspections by United States personnel.

(12) Names, addresses, and telephone numbers of persons to be notified in an emergency.

(13) Shutdowns for periodic maintenance and issuing of NOTAM for routine or emergency shutdowns.

(14) Commissioning of the MLS facility.

(15) An acceptable procedure for amending or revising the manual.

(16) An explanation of the kinds of activities (such as construction or grading) in the vicinity of the MLS facility that may require shutdown or recertification of the MLS facility by FAA flight check.

(17) Procedures for conducting a ground check of the azimuth and elevation alignment.

(18) The following information concerning the MLS facility:

(i) Facility component locations with respect to airport layout, instrument runways, and similar areas.

(ii) The type, make and model of the basic radio equipment that provides the service including required test equipment.

(iii) The station power emission, channel, and frequency of the azimuth, elevation, DME, marker beacon, and associated compass locators, if any.

(iv) The hours of operation.

(v) Station identification call letters and method of station identification and the time spacing of the identification.

(vi) A description of the critical parts that may not be changed, adjusted, or repaired without an FAA flight check to confirm published operations.

(d) The owner or his maintenance representative must make a ground check of the MLS facility periodically in accordance with procedures approved by the FAA at the time of commissioning, and must report the results of the checks as provided in § 171.327.

(e) The only modifications permitted are those that are submitted to FAA for approval by the MLS equipment manufacturer. The owner or sponsor of the facility must incorporate these modifications in the MLS equipment. Associated changes must also be made to the operations and maintenance manual required in paragraph (c) of this section. These and all other corrections and additions to this operations and maintenance manual must also be submitted to FAA for approval.

(f) The owner or the owner's maintenance representative must participate in inspections made by the FAA.

(g) The owner must ensure the availability of a sufficient stock of spare parts, including solid state components, or modules to make possible the prompt replacement of components or modules that fail or deteriorate in service.

(h) FAA approved test instruments must be used for maintenance of the MLS facility.

(i) Inspection consists of an examination of the MLS equipment to ensure that unsafe operating conditions do not exist.

(j) Monitoring of the MLS radiated signal must ensure a high degree of integrity and minimize the requirements for ground and flight inspection. The monitor must be checked daily during the in-service test evaluation period (96 hour burn in) for calibration and stability. These tests and ground checks of azimuth, elevation, DME, and marker beacon radiation characteristics must be conducted in accordance with the maintenance requirements of this section.

§ 171.327 Operational records.

The owner of the MLS facility or his maintenance representative must submit the following operational records at the indicated time to the appropriate FAA regional office where the facility is located.

(a) *Facility Equipment Performance and Adjustment Data (FAA Form 198).* The FAA Form 198 shall be filled out by the owner or his maintenance representative with the equipment adjustments and meter readings as of the time of facility commissioning. One copy must be kept in the permanent records of the facility and two copies must be sent to the appropriate FAA regional office. The owner or his maintenance representative must revise the FAA Form 198 data after any major repair, modernization, or retuning to reflect an accurate record of facility operation and adjustment.

(b) *Facility Maintenance Log (FAA Form 6030-1).* FAA Form 6030-1 is permanent record of all the activities required to maintain the MLS facility. The entries must include all malfunctions met in maintaining the facility including information on the kind of work and adjustments made, equipment failures, causes (if determined) and corrective action taken. In addition, the entries must include completion of periodic maintenance required to maintain the facility. The owner or his maintenance representative must keep the original of each form at the facility and send a copy to the appropriate FAA regional office at the end of each month in which it is prepared. However, where an FAA approved remote monitoring system is installed which precludes the need for periodic maintenance visits to the facility, monthly reports from the remote monitoring system control point must be forwarded to the appropriate FAA regional office, and a hard copy retained at the control point.

(c) *Technical Performance Record (FAA Form 6830 (formerly FAA Form 418)).* This form contains a record of system parameters as specified in the manufacturers equipment manual. This data will be recorded on each scheduled visit to the facility. The owner or his maintenance representative shall keep the original of each record at the facility and send a copy of the form to the appropriate FAA regional office.

SUBCHAPTER K—ADMINISTRATIVE REGULATIONS

PART 183—REPRESENTATIVES OF THE ADMINISTRATOR

Subpart A—General

Sec.
183.1 Scope.

Subpart B—Certification of Representatives

183.11 Selection.
183.13 Certification.
183.15 Duration of certificates.
183.17 Reports.

Subpart C—Kinds of Designations: Privileges

183.21 Aviation Medical Examiners.
183.23 Pilot examiners.
183.25 Technical personnel examiners.
183.27 Designated aircraft maintenance inspectors.
183.29 Designated engineering representatives.
183.31 Designated manufacturing inspection representatives.
183.33 Designated airworthiness representative.

AUTHORITY: Secs. 301(c), 305, 307(b), 313(a), and 314, 72 Stat. 744; 49 U.S.C. 1341(c), 1346, 1348(b), 1354(a), and 1355, and sec. 501, 65 Stat. 290; 31 U.S.C. 483a, unless otherwise noted.

SOURCE: Docket No. 1151, 27 FR 4951, May 26, 1962, unless otherwise noted.

EDITORIAL NOTE: For miscellaneous amendments to cross references in this Part 183, see Amdt. 183-1, 31 FR 9211, July 6, 1966.

Subpart A—General

§ 183.1 Scope.

This part describes the requirements for designating private persons to act as representatives of the Administrator in examining, inspecting, and testing persons and aircraft for the purpose of issuing airman and aircraft certificates. In addition, it states the privileges of those representatives and prescribes rules for their exercising of those privileges.

Subpart B—Certification of Representatives

§ 183.11 Selection.

(a) The Federal Air Surgeon, or his authorized representative within the FAA, may select Aviation Medical Examiners from qualified physicians who apply. In addition, the Federal Air Surgeon may designate qualified forensic pathologists to assist in the medical investigation of aircraft accidents.

(b) Any local Flight Standards Inspector may select a pilot examiner, technical personnel examiner, or a designated aircraft maintenance inspector whenever he determines there is a need for one.

(c) (1) The Chief of the Aircraft Engineering Division, or the Chief's designee, may select Designated Engineering Representatives from qualified persons who apply by a letter accompanied by a "Statement of Qualifications of Designated Engineering Representative."

(2) The Chief of the Aircraft Manufacturing Division, or the Chief's designee, may select Designated Manufacturing Inspection Representatives from qualified persons who apply by a letter accompanied by a "Statement of Qualifications of Designated Manufacturing Inspection Representative."

(d) The Director, Air Traffic Service, may select Air Traffic Control Tower Operator Examiners.

(e) The Director of Airworthiness, or the Director's designee, may select Designated Airworthiness Representatives from qualified persons who apply by a letter accompanied by a "Statement of Qualifications of Designated Airworthiness Representative."

(Approved by the Office of Management and Budget under control number 2120-0035)

(Secs. 313(a), 314, 601, 603, 605, and 1102, Federal Aviation Act of 1958, as amended (49 U.S.C. 1354(a), 1355, 1421, 1423, 1425, and 1502); sec. 6(c) Department of Transportation Act (49 U.S.C. 1655(c)))

[Doc. No. 1151, 27 FR 4951, May 26, 1962, as amended by Amdt. 183-7, 45 FR 32669, May

19, 1980; Amdt. 183-8, 48 FR 16179, Apr. 14, 1983]

§ 183.13 Certification.

(a) A "Certificate of Designation" and an appropriate Identification Card is issued to each Aviation Medical Examiner and to each forensic pathologist designated under § 183.11(a).

(b) A "Certificate of Authority" specifying the kinds of designation for which the person concerned is qualified and stating an expiration date is issued to each Flight Standards Designated Representative, along with a "Certificate of Designation" for display purposes, designating the holder as a Flight Standards Representative and specifying the kind of designation for which he is qualified.

(c) A "Certificate of Authority," stating the specific functions which the person concerned is authorized to perform and stating an expiration date, is issued to each Designated Airworthiness Representative, along with a "Certificate of Designation" for display purposes.

(Secs. 601 and 602, 72 Stat. 752, 49 U.S.C. 1421-1422; secs. 313(a), 314, 601, 603, 605, and 1102, Federal Aviation Act of 1958, as amended (49 U.S.C. 1354(a), 1355, 1421, 1423, 1425, and 1502); sec. 6(c) Department of Transportation Act (49 U.S.C. 1655(c)))

[Doc. No. 1151, 27 FR 4951, May 26, 1962, as amended by Amdt. 183-2, 32 FR 46, Jan. 5, 1967; Amdt. 183-8, 48 FR 16179, Apr. 14, 1983]

§ 183.15 Duration of certificates.

(a) Unless sooner terminated under paragraph (d) of this section, a designation as an Aviation Medical Examiner is effective for 1 year after the date it is issued, and may be renewed for additional periods of 1 year in the Federal Air Surgeon's discretion. A renewal is effected by a letter and issuance of a new identification card specifying the renewal period.

(b) Unless sooner terminated under paragraph (d) of this section, a designation as a Flight Standards Designated Representative is effective for one year after the date it is issued and may be renewed for additional periods of one year in the Administrator's discretion.

(c) Unless sooner terminated under paragraph (d) of this section, a designation as a Designated Airworthiness Representative is effective until the expiration date shown on the Certificate of Authority.

(d) A designation made under this subpart terminates—

(1) Upon the written request of the representative;

(2) Upon the written request of the employer in any case in which the recommendation of the employer is required for the designation;

(3) Upon the representative being separated from the employment of the employer who recommended him for certification;

(4) Upon a finding by the Administrator that the representative has not properly performed his duties under the designation;

(5) Upon the assistance of the representative being no longer needed by the Administrator; or

(6) For any reason the Administration considers appropriate.

(Secs. 313(a), 314, 601, 603, 605, and 1102, Federal Aviation Act of 1958, as amended (49 U.S.C. 1354(a), 1355, 1421, 1423, 1425, and 1502); sec. 6(c) Department of Transportation Act (49 U.S.C. 1655(c)))

[Doc. No. 1151, 27 FR 4951, May 26, 1962, as amended by Amdt. 183-3, 33 FR 1072, Jan. 27, 1968; Amdt. 183-8, 48 FR 16179, Apr. 14, 1983]

§ 183.17 Reports.

Each representative designated under this part shall make such reports as are prescribed by the Administrator.

Subpart C—Kinds of Designations: Privileges

§ 183.21 Aviation Medical Examiners.

An Aviation Medical Examiner may—

(a) Accept applications for physical examinations necessary for issuing medical certificates under Part 67 of this chapter;

(b) Under the general supervision of the Federal Air Surgeon or the appropriate senior regional flight surgeon, conduct those physical examinations;

(c) Issue or deny medical certificates in accordance with Part 67 of this chapter, subject to reconsideration by the Federal Air Surgeon or his authorized representatives within the FAA;

(d) Issue student pilot certificates as specified in § 61.85 of this chapter; and

(e) As requested, participate in investigating aircraft accidents.

(Secs. 601 and 602, 72 Stat. 752, 49 U.S.C. 1421-1422)

[Doc. No. 1151, 27 FR 4951, May 26, 1962, as amended by Amdt. 183-2, 32 FR 46, Jan. 5, 1967; Amdt. 183-5, 38 FR 12203, May 10, 1973]

§ 183.23 Pilot examiners.

Any pilot examiner, instrument rating examiner, or airline transport pilot examiner may—

(a) As authorized in his designation, accept applications for flight tests necessary for issuing pilot certificates and ratings under this chapter;

(b) Under the general supervision of the appropriate local Flight Standards Inspector, conduct those tests; and

(c) In the discretion of the appropriate local Flight Standards Inspector, issue temporary pilot certificates and ratings to qualified applicants.

§ 183.25 Technical personnel examiners.

(a) A designated mechanic examiner (DME) (airframe and power plant) may—

(1) Accept applications for, and conduct, mechanic oral and practical tests necessary for issuing mechanic certificates under Part 65 of this chapter; and

(2) In the discretion of the appropriate local Flight Standards Inspector, issue temporary mechanic certificates to qualified applicants.

(b) A designated parachute rigger examined (DPRE) may—

(1) Accept applications for, and conduct, oral and practical tests necessary for issuing parachute rigger certificates under Part 65 of this chapter; and

(2) In the discretion of the appropriate local Flight Standards Inspector, issue temporary parachute rigger certificates to qualified applicants.

(c) An air traffic control tower operator examiner may—

(1) Accept applications for, and conduct, written and practical tests necessary for issuing control tower operator certificates under Part 65 of this chapter; and

(2) In the discretion of the Director, Air Traffic Service, issue temporary control tower operator certificates to qualified applicants.

(d) A designated flight engineer examiner (DFEE) may—

(1) Accept applications for, and conduct, oral and practical tests necessary for issuing flight engineer certificates under Part 63 of this chapter; and

(2) In the discretion of the appropriate local Flight Standards Inspector, issue temporary flight engineer certificates to qualified applicants.

(e) A designated flight navigator examiner (DFNE) may—

(1) Accept applications for, and conduct, oral and practical tests necessary for issuing flight navigator certificates under Part 63 of this chapter; and

(2) In the discretion of the appropriate local Flight Standards Inspector, issue temporary flight navigator certificates to qualified applicants.

(f) A designated aircraft dispatcher examiner (DADE) may—

(1) Accept applications for, and conduct, written and practical tests necessary for issuing aircraft dispatcher certificates under Part 65 of this chapter; and

(2) In the discretion of the appropriate local Flight Standards Inspector, issue temporary aircraft dispatcher certificates to qualified applicants.

§ 183.27 Designated aircraft maintenance inspectors.

A designated aircraft maintenance inspector (DAMI) may approve maintenance on civil aircraft used by United States military flying clubs in foreign countries.

§ 183.29 Designated engineering representatives.

(a) A structural engineering representative may approve structural engineering information and other structural considerations within limits prescribed by and under the general supervision of the Administrator, whenever the representative determines that information and other structural considerations comply with the applicable regulations of this chapter.

(b) A power plant engineering representative may approve information relating to power plant installations within limitations prescribed by and under the general supervision of the Administrator whenever the representative determines that information complies with the applicable regulations of this chapter.

(c) A systems and equipment engineering representative may approve engineering information relating to equipment and systems other than those of a structural, powerplant, or radio nature, within limits prescribed by and under the general supervision of the Administrator, whenever the representative determines that information complies with the applicable regulations of this chapter.

(d) A radio engineering representative may approve engineering information relating to the design and operating characteristics of radio equipment, within limits prescribed by and under the general supervision of the Administrator whenever the representative determines that information complies with the applicable regulations of this chapter.

(e) An engine engineering representative may approve engineering information relating to engine design, operation and service, within limits prescribed by and under the general supervision of the Administrator, whenever the representative determines that information complies with the applicable regulations of this chapter.

(f) A propeller engineering representative may approve engineering information relating to propeller design, operation, and maintenance, within limits prescribed by and under the general supervision of the Administrator whenever the representative determines that information complies with the applicable regulations of this chapter.

(g) A flight analyst representative may approve flight test information, within limits prescribed by and under the general supervision of the Administrator, whenever the representative determines that information complies with the applicable regulations of this chapter.

(h) A flight test pilot representative may make flight tests, and prepare and approve flight test information relating to compliance with the regulations of this chapter, within limits prescribed by and under the general supervision of the Administrator.

(i) An acoustical engineering representative may witness and approve aircraft noise certification tests and approve measured noise data and evaluated noise data analyses, within the limits prescribed by, and under the general supervision of, the Administrator, whenever the representative determines that the noise test, test data, and associated analyses are in conformity with the applicable regulations of this chapter. Those regulations include, where appropriate, the methodologies and any equivalencies previously approved by the Director, Environment and Energy, for that noise test series. No designated acoustical engineering representative may determine that a type design change is not an acoustical change, or approve equivalencies to prescribed noise procedures or standards.

[Doc. No. 1151, 27 FR 4951, May 26, 1962, as amended by Amdt. 183-7, 45 FR 32669, May 19, 1980]

§ 183.31 Designated manufacturing inspection representatives.

A designated manufacturing inspection representative (DMIR) may, within limits prescribed by, and under the general supervision of, the Administrator, do the following:

(a) Issue—

(1) Original airworthiness certificates for aircraft and airworthiness approvals for engines, propellers, and product parts that conform to the approved design requirements and are in a condition for safe operation;

(2) Export certificates of airworthiness and airworthiness approval tags in accordance with Subpart L of Part 21 of this chapter;

(3) Experimental certificates for aircraft for which the manufacturer holds the type certificate and which have undergone changes to the type design requiring a flight test; and

(4) Special flight permits to export aircraft.

(b) Conduct any inspections that may be necessary to determine that—

(1) Prototype products and related parts conform to design specifications; and

(2) Production products and related parts conform to the approved type design and are in condition for safe operation.

(c) Perform functions authorized by this section for the manufacturer, or the manufacturer's supplier, at any location authorized by the FAA.

[Doc. No. 16622, 45 FR 1416, Jan. 7, 1980]

§ 183.33 Designated Airworthiness Representative.

A Designated Airworthiness Representative (DAR) may, within limits prescribed by and under the general supervision of the Administrator, do the following:

(a) Perform examination, inspection, and testing services necessary to the issuance of certificates, including issuing certificates, in the areas of maintenance, manufacturing, and engineering as may be authorized by the Director of Airworthiness.

(b) Charge a fee for his or her services.

(c) Perform authorized functions at any authorized location.

(Secs. 313(a), 314, 601, 603, 605, and 1102, Federal Aviation Act of 1958, as amended (49 U.S.C. 1354(a), 1355, 1421, 1423, 1425, and 1502); sec.6(c) Department of Transportation Act (49 U.S.C. 1655(c)))

[Doc. No. 23140, 48 FR 16179, Apr. 14, 1983]

PART 185—TESTIMONY BY EMPLOYEES AND PRODUCTION OF RECORDS IN LEGAL PROCEEDINGS, AND SERVICE OF LEGAL PROCESS AND PLEADINGS

Sec.

185.1 Purpose.
185.3 Acceptance of service on behalf of the Secretary of Transportation or the Administrator.
185.5 Testimony by employees and production of records in legal proceedings.

Authority: Secs. 303, 313, 72 Stat. 747, 752; 49 U.S.C. 1344, 1354, 1655; Part 9 of the regulations of the Office of the Secretary of Transportation (49 CFR Part 9) as amended (34 FR 11972).

Source: Docket No. 9900, 34 FR 16622, Oct. 17, 1969, unless otherwise noted.

§ 185.1 Purpose.

(a) The purpose of this part is to name the FAA officials who, pursuant to Part 9 of the regulations of the Office of the Secretary of Transportation (49 CFR Part 9) as amended (34 FR 11972, July 16, 1969), are those:

(1) Upon whom legal process or pleadings may be served in any legal proceeding concerning the FAA, and who have authority to acknowledge the service and take further action thereon; and

(2) Who otherwise perform the functions prescribed by Part 9 in legal proceedings concerning the FAA with respect to testimony by FAA employees and production of FAA records in legal proceedings.

(b) For purposes of this part, "legal proceedings" includes any proceeding before a court of law, administrative board or commission, hearing officer, or other body conducting a legal or administrative proceeding.

§ 185.3 Acceptance of service on behalf of the Secretary of Transportation or the Administrator.

Legal process or pleadings in any legal proceeding concerning the FAA may be served, at the option of the server, on the Chief Counsel, Deputy Chief Counsel, Assistant Chief Counsel, Litigation Division, of the FAA, or any other FAA official designated by the Chief Counsel, with the same effect as if served upon the Secretary of Transportation or the Administrator. The official accepting the service under this section acknowledges the service and takes further action as appropriate.

§ 185.5 Testimony by employees and production of records in legal proceedings.

The Chief Counsel, and each regional counsel, the Aeronautical Center counsel, and the NAFEC counsel, with respect to matters arising within his respective jurisdiction, and any other FAA official designated by the Chief Counsel, perform the functions in legal proceedings (other than one described in § 185.3 of this part) as prescribed by Part 9 of the regulations of the Office of the Secretary of Transportation, with respect to testimony by FAA employees and production of FAA records in legal proceedings.

PART 187—FEES

Sec.
187.1 Scope.
187.5 Duplicates of licenses.
187.7 Copies; seal.
187.15 Payment of fees.

APPENDIX A—FEE SCHEDULE FOR CERTIFICATION SERVICES PERFORMED OUTSIDE THE UNITED STATES ON BEHALF OF FOREIGN NATIONALS OTHER THAN RESIDENT ALIENS

AUTHORITY: Sec. 501, 65 Stat. 290; 31 U.S.C. 483a; secs. 301, 302, 303, 305, 307, 313, 314; 72 Stat. 744, 747, 749, 752, 754; 49 U.S.C. 1341, 1343, 1344, 1346, 1348, 1354, 1355, unless otherwise noted.

SOURCE: Docket No. 8347, 32 FR 12051, Aug. 22, 1967, unless otherwise noted.

§ 187.1 Scope.

This part prescribes fees only for FAA services for which fees are not prescribed in other parts of this chapter or in 49 CFR Part 7. The fees for services furnished in connection with making information available to the public are prescribed exclusively in 49 CFR Part 7.

§ 187.5 Duplicates of licenses.

The fee for furnishing to a person entitled thereto a replacement, duplicate, or facsimile of a certificate or other document evidencing a license, for which a fee is not specifically provided elsewhere in this chapter, is $2.

§ 187.7 Copies; seal.

The fees for furnishing photostatic or similar copies of documents and for affixation of the seal for a certification or validation are the same as those provided in Subpart H of 49 CFR Part 7.

§ 187.15 Payment of fees.

The fees prescribed in this part are payable to the Federal Aviation Administration by check, money order, or draft payable in U.S. currency and drawn on a U.S. bank.

(Secs. 313, 601, 602, Federal Aviation Act of 1958, as amended (49 U.S.C. 1354, 1421, and 1422); sec. 6(c), Dept. of Transportation Act (49 U.S.C. 1655(c)); Title V, Independent Offices Appropriations Act of 1952 (31 U.S.C. 483(a)); sec. 28, International Air Transportation Competition Act of 1979 (49 U.S.C. 1159(b)))

[Doc. No. 22052, 47 FR 35694, Aug. 16, 1982]

APPENDIX A—FEE SCHEDULE FOR CERTIFICATION SERVICES PERFORMED OUTSIDE THE UNITED STATES ON BEHALF OF FOREIGN NATIONALS OTHER THAN RESIDENT ALIENS

(a) Except as provided in paragraph (e), the fees for certification and additional ratings issued under Part 61 of this chapter are as follows:

(1) Each student pilot certificate issued by the FAA, $14.

(2) Each student pilot certificate issued by a Designated FAA Examiner, $11.

(3) Each certificate issued under § 61.75 or § 61.77, $11.

(4) Each written test administered by the FAA for any certificate or added rating, $19.

(5) Each practical test (oral or flight or combined oral and flight) administered by the FAA for a private pilot certificate or added rating, $130.

(6) Each practical test (oral or flight or combined oral and flight) administered by the FAA for a commercial pilot certificate or added rating, $159.

(7) Each practical test (oral or flight or combined oral and flight) administered by the FAA for an airline transport pilot certificate or additional rating, $225.

(8) Each practical test (oral or flight or combined oral and flight) administered by the FAA for a flight instructor certificate or added rating or exchange of certificate under § 61.199, $171.

(9) Each practical test (oral or flight or combined oral and flight) administered by the FAA for renewal of a flight instructor certificate under § 61.197, $70.

(10) Processing of each written or practical test (oral or flight or combined oral and flight) administered by a Designated FAA Examiner for any pilot certificate or added rating, $37.

(b) Except as provided in paragraph (e), the fees for certification and additional ratings issued under Part 63 are as follows:

(1) Each written test administered by the FAA, $29.

(2) Each practical test administered by the FAA, $508.

(3) Processing of each practical test administered by a Designated FAA Examiner, $37.

(4) Each certificate issued under § 63.23 or § 63.42, $37.

(c) The fees for certificates and additional ratings issued under Part 65 are as follows:

(1) Each initial Inspection Authorization certificate issued under § 65.91, $291.

(2) Each practical test administered by the FAA for a mechanic certificate with an airframe rating or for an added airframe rating, $409.

(3) Each practical test administered by the FAA for a mechanic certificate with a powerplant rating or for an added powerplant rating, $308.

(4) Processing of each practical test administered by a Designated FAA Examiner for any certificate or added rating, $27.

(d) Hourly rates for certification actions under § 145.71 are as follows:

(1) $47. for each technical hour.

(2) $14. for each clerical hour.

(e) The fees for the initial airman certificates for which evidence of medical qualification is provided by an FAA medical certificate are as follows:

(1) Each initial student pilot certificate issued by FAA, $22.

(2) Each initial student pilot certificate issued by a Designated FAA Examiner, $19.

(3) Each initial certificate issued under § 61.75 or § 61.77, $19.

(4) Each initial certificate issued under § 63.23 or § 63.42, $45.

(Secs. 313, 601, 602, Federal Aviation Act of 1958, as amended (49 U.S.C. 1354, 1421, and 1422); sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)); Title V, Independent Offices Appropriations Act of 1952 (31 U.S.C. 483(a)); sec. 28, International Air Transportation Competition Act of 1979 (49 U.S.C. 1159(b)))

[Doc. No. 22052, 47 FR 35694, Aug. 16, 1982]

PART 189—USE OF FEDERAL AVIATION ADMINISTRATION COMMUNICATIONS SYSTEM

Sec.
189.1 Scope.
189.3 Kinds of messages accepted.
189.5 Charges for messages.
189.7 Limitation of liability.

AUTHORITY: Secs. 301(c), 305, 307(b), 313(a), and 314, 72 Stat. 744; 49 U.S.C. 1341(c), 1346, 1348(b), 1354(a), and 1355, and sec. 501, 65 Stat. 290; 31 U.S.C. 483a.

SOURCE: Docket No. 1151, 27 FR 4954, May 26, 1962, unless otherwise noted.

§ 189.1 Scope.

This part describes the kinds of messages that may be transmitted by FAA communications stations and prescribes the charges therefor.

§ 189.3 Kinds of messages accepted.

(a) FAA International Flight Service Stations or FAA Flight Service Stations located outside of the 48 contiguous States and the District of Columbia accept for transmission any messages, concerning international or overseas aircraft operations, described in paragraphs (a) (1) through (8) of this section. Other FAA Flight Service Stations accept for transmission only messages described in paragraphs (a) (1) through (6) of this section, but relay any message described in this section that was originally accepted for transmission at an FAA Flight Service Station outside of the 48 contiguous States and the District of Columbia, or was received from a foreign station of the integrated international aeronautical network, and that in normal routing would require transit of the 48 contiguous States and the District of Columbia to reach an overseas address:

(1) Distress messages and distress traffic.

(2) Messages concerning the safety of human life.

(3) Flight safety messages concerning—

(i) Air traffic control, including—

(*a*) Messages concerning aircraft in flight or about to depart;

(*b*) Departure messages;

(*c*) Flight plan departure messages;

(*d*) Arrival messages;

(*e*) Flight plan messages;

(*f*) Flight notification messages;

(*g*) Messages concerning flight cancellation; and

(*h*) Messages concerning delayed departure;

(ii) Position reports from aircraft;

(iii) Messages originated by an aircraft operating agency of immediate concern to an aircraft in flight or about to depart; and

(iv) Meteorological advice of immediate concern to an aircraft in flight or about to depart.

(4) Meteorological messages concerning—

(i) Meteorological forecasts;

(ii) Meteorological observations exclusively; or

(iii) Other meteorological information exchanged between meteorological offices.

(5) Aeronautical administrative messages—

(i) Concerning the operation or maintenance of facilities essential to the safety or regularity of aircraft operation;

(ii) Essential to efficient functioning of aeronautical telecommunications; or

(iii) Between civil aviation authorities concerning aircraft operation.

(6) Notices to airmen.

(7) Flight regularity messages—

(i) Addressed to the point of intended landing and to not more than two other addressees in the general area of the route segment of the flight to which the message refers, containing information required for weight and balance computation and remarks essential to the rapid unloading of the aircraft;

(ii) Concerning changes, taking effect within 72 hours, in aircraft operating schedules;

(iii) Concerning the servicing of aircraft en route or scheduled to depart within 48 hours;

(iv) Concerning changes in the collective requirements for passengers, crew, or cargo of aircraft en route or about to depart, if the changes are caused by unavoidable deviations from normal operating schedules and are necessary for flight regularity;

(v) Concerning non-routine landings to be made by aircraft en route or about to depart;

(vi) Concerning parts or materials urgently needed to operate aircraft en route or scheduled to depart within 48 hours; or

(vii) Concerning pre-flight arrangement of air navigation services and, in the case of non-scheduled or irregular operations, operational servicing of aircraft scheduled to depart within 48 hours.

(8) Messages originated by and addressed to aircraft operating agencies or their representatives that directly bear on the efficient and economic conduct or day to day operations, if adequate non-United States communication facilities are not available and the messages concern—

(i) Matter described in paragraph (a)(7) of this section, but not meeting the time limitations described therein.

(ii) Aircraft parts, equipment, or supplies, air navigation or communications, or essential ground facilities;

(iii) Train or hotel reservations for passengers or employees;

(iv) Lost baggage or personal effects;

(v) Tickets or cargo shipments and payment therefor;

(vi) Location of passengers and cargo;

(vii) New or revised passenger or cargo rates;

(viii) Crew assignments and similar operations personnel matters taking effect within 7 days;

(ix) Post flight reports for record purposes;

(x) Publicity and special handling regarding dignitaries; or

(xi) Reservations, when originated by aircraft operating agencies to secure space required in transport aircraft.

(b) The messages described in paragraphs (a) (1) through (7) of this section are given priority over the messages described in paragraph (a)(8) of this section.

§ 189.5 Charges for messages.

(a) The messages described in § 189.3(a) (1) through (7) are transmitted without charge.

(b) The charge for a message that, in whole or in part, contains matters described in § 189.3(a)(8), is 25 cents for each ten words, or part thereof, of text and signature, plus applicable taxes, for each addressee.

(c) Whenever the refiling of a message with a non-FAA communications facility is necessary, the refiling is made on a "collect" basis at no cost to, or assumption of liability by, the FAA. The cost of local telecommunications facilities used for the acceptance or delivery of a message must be paid by the user.

(d) Charges must be paid in United States currency to the FAA official in charge of the communications station first receiving the message, or to any other designated FAA official. However, the Director of the region in which the FAA communications station first transmitting or receiving the message is located may make advance arrangements for deferred payment of charges on a periodic basis or in any specific case where advance payment is not practicable.

[Doc. No. 1151, 27 FR 4954, May 26, 1962, as amended by Amdt. 189-1, 38 FR 9008, Apr. 9, 1973]

§ 189.7 Limitation of liability.

The United States is not liable, beyond the amount of the charge made, for any error or delay, in transmission or delivery, or for non-delivery, of any message accepted for transmission under this part, even if the error, delay, or non-delivery is caused by the negligence of an employee of the United States.

PART 191—WITHHOLDING SECURITY INFORMATION FROM DISCLOSURE UNDER THE AIR TRANSPORTATION SECURITY ACT OF 1974

Sec.

191.1 Applicability.
191.3 Records and information withheld.
191.5 When disclosure of information is prohibited.
191.7 Records containing both available and unavailable information.

AUTHORITY: Secs. 313(a), 316(d)(2), 601, Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1357(d)(2), 1421); sec. 6(c), Dept. of Transportation Act (49 U.S.C. 1655(c)).

SOURCE: Docket No. 15855, 41 FR 53777, Dec. 9, 1976, unless otherwise noted.

§ 191.1 Applicability.

(a) This part implements section 316(d)(2) of the Federal Aviation Act of 1958 (49 U.S.C. 1357(d)(2)) and governs the release of any record, and any information contained therein, in the possession of the FAA which has been obtained or developed in the conduct of research and development activities to develop, modify, test, and evaluate systems procedures, facilities, and devices to protect persons and property aboard aircraft in air transportation or intrastate air transportation against acts of criminal violence and aircraft piracy.

(b) For the purposes of this part, "record" includes any writing, drawing, map, recording, tape, film, photograph, or other documentary material by which information is preserved.

§ 191.3 Records and information withheld.

(a) Notwithstanding 5 U.S.C. 552, the records described in § 191.1(a) are not made available for public inspection or copying nor is any information contained in those records released to the public when disclosure thereof is prohibited by the Director, FAA Civil Aviation Security Service or his designee.

(b) Records subject to paragraph (a) of this section include, but are not limited to, those containing information which pertains to:

(1) Any hijacker profile.

(2) Any profile used in baggage screening.

(3) The security program of any airport.

(4) The security program of any air carrier.

(5) Any device for the detection of any explosive or incendiary device or weapon.

(6) Any device for protection against, or detection of, cargo theft.

(7) Any contingency security plan.

(8) Any security communications equipment and procedures.

(9) Any threat of sabotage, terrorism or air piracy.

(10) The security program of any indirect air carrier and that portion of the security program of the United States Postal Service that relates to security of parcel mail to be transported by air.

[Doc. No. 15855, 41 FR 53777, Dec. 9, 1976, as amended by Amdt. 191-1, 44 FR 72345, Dec. 13, 1979]

§ 191.5 When disclosure of information is prohibited.

The Director, FAA Civil Aviation Security Service or his designee prohibits disclosure of a record and information contained therein under § 191.3 if in his opinion it would:

(a) Constitute an unwarranted invasion of personal privacy (including, but not limited to, information contained in any personnel, medical, or similar file);

(b) Reveal trade secrets or privileged or confidential commercial or financial information obtained from any person; or

(c) Be detrimental to the safety of persons traveling in air transportation or intrastate air transportation.

§ 191.7 Records containing both available and unavailable information.

If a record contains information that the Director, Civil Aviation Security Service or his designee determines cannot be disclosed under this part, but also contains information that can be disclosed, the latter information will be provided for public inspection and copying.

[Doc. No. 15855, 41 FR 53777, Dec. 9, 1976; 41 FR 55334, Dec. 20, 1976]

SUBCHAPTERS L—M [RESERVED]

SUBCHAPTER N—WAR RISK INSURANCE

PART 198—AVIATION INSURANCE

Sec.
198.1 Eligibility of aircraft for insurance.
198.3 Basis of insurance.
198.5 Types of insurance coverage available.
198.7 Amount of insurance coverage available.
198.9 Application for insurance.
198.11 Change in status of aircraft.
198.13 Premium insurance—payment of premiums.
198.15 Nonpremium insurance—payment of registration fees.
APPENDIX A—FORM OF APPLICATION NAMED IN SEC. 198.9

AUTHORITY: 49 U.S.C. 1531 through 1542; (49 U.S.C. 106(g)) (Revised Pub. L. 97-449, Jan. 12, 1983); and 49 CFR 1.47(b).

SOURCE: Docket No. 24223, 50 FR 51336, Dec. 16, 1985, unless otherwise noted.

EFFECTIVE DATE NOTE: Part 198 was revised at 50 FR 51336, Dec. 16, 1985, effective January 15, 1986. For the convenience of the user, Part 198 remaining in effect until January 15, 1986, follows the text of this new part.

§ 198.1 Eligibility of aircraft for insurance.

An aircraft operation is eligible for insurance if:

(a) The President of the United States has determined that the continuation of that aircraft operation is necessary to carry out the foreign policy of the United States,

(b) The aircraft operation is in foreign air commerce or between two or more points all of which are outside the United States; and

(c) The Administrator finds that commercial insurance against loss or damage arising out of any risk from the aircraft operation cannot be obtained on reasonable terms and conditions from any company authorized to engage in an insurance business in a State of the United States.

§ 198.3 Basis of insurance.

(a) Application for insurance with premium may be made if the eligibility criteria in § 198.1 are met. Premiums charged for insurance shall be based, insofar as practicable, upon consideration of the risk involved.

(b) Applications for insurance without premium may be made if the eligibility criteria in § 198.1 are met and air services are to be performed under contract to a Federal agency which has agreed to indemnify the Administrator, acting for the Secretary of Transportation, against all losses covered by such insurance.

§ 198.5 Types of insurance coverage available.

Application may be made for insurance against loss or damage with respect to the following persons, property, or interests:

(a) Aircraft engaged in operations which are eligible for insurance, as defined in § 198.1;

(b) Any person employed or transported on the aircraft referred to in paragraph (a);

(c) The baggage of persons referred to in paragraph (b);

(d) Cargoes transported or to be transported on the aircraft referred to in paragraph (a);

(e) Any other liability of the aircraft referred to in paragraph (a) or of its owner or operator of the nature customarily covered by insurance.

§ 198.7 Amount of insurance coverage available.

(a) For each aircraft the amount insured may not exceed the amount by which the applicant has otherwise insured or self-insured the aircraft or itself against damage or liability arising from any risk. In the case of hull insurance, the amount insured shall not exceed the fair and reasonable value of the aircraft.

(b) Policies issued without premium may be revised from time to time, by agreement of the Federal Aviation Administrator and the insured and with the approval of the Federal agency on whose behalf contract air services are to be performed, to add aircraft or contracts or to amend amounts of coverage if the insured has changed the amount by which it has otherwise insured or self-insured the aircraft or itself.

§ 198.9 Application for insurance.

(a) Application for premium or nonpremium insurance shall be made in accordance with the applicable form set forth in Appendix A of this part. Application for hull and liability insurance shall be filed on the same form.

(b) Each applicant for insurance with premium under this part also shall submit to the FAA with its application a letter describing in detail the operations in which the aircraft is or will be engaged and stating the type of insurance coverage being sought and the reason it is being sought.

§ 198.11 Change in status of aircraft.

In the event of sale, lease, confiscation, requisition, total loss, or any other change in the status of an aircraft covered by insurance under this part, notice shall be given to the Administrator within 10 working days after the change in status.

§ 198.13 Premium insurance—payment of premiums.

The premium for insurance issued under this part shall be paid within 10 days after receipt, by the insured, of notice that premium payment is due. Premiums shall be sent to the Federal Aviation Administrator by check made payable to the Federal Aviation Administration.

§ 198.15 Nonpremium insurance—payment of registration fees.

(a) The registration fee for each aircraft to be covered by nonpremium insurance shall be $200. The fee shall cover the cost of hull and liability insurance.

(b) An application for nonpremium insurance shall be accomplished by the proper fee, payable by check to the order of the Federal Aviation Administration. Registration fees are not returnable unless applications are rejected.

(c) Requests made after issuance of a nonpremium policy for the addition of aircraft shall be accompanied by the registration fee for each aircraft.

APPENDIX A—FORM OF APPLICATION NAMED IN SEC. 198.9

UNITED STATES OF AMERICA

DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

Application for Aviation Insurance

Application is made for aviation insurance, pursuant to Title XIII of the Federal Aviation Act of 1958, as amended, and in accordance with all provisions of law and subject to all limitations thereof, on the aircraft described in the attached "Schedule of Aircraft," with the understanding that this application does not commit the Government to any liability or make the applicant liable for any premium or fees unless insurance is effected by the Federal Aviation Administrator.

Name of Applicant ——————————
Address ——————————————
——————————————————

Basis of Insurance
( ) Insurance with premium
( ) Insurance without premium:

Contracting Federal Agency ————————
Date and Number of Contract ————————

Hull

Amounts set forth in the attached "Schedule of Aircraft" as representing the amount of hull insurance desired for each such aircraft shall not exceed the amount in effect on the date of this application, by which the applicant has insured or self-insured that aircraft.

Liability, Exclusive of Cargo

The type and amounts of coverage required for the aircraft described in the attached "Schedule of Aircraft" shall be indicated and the limits of liability for each such coverage shall be specified in the schedule, but such limits shall not exceed the corresponding amounts in effect on the date of this application by which the applicant has insured or self-insured against liability.

Liability of Cargo

Limits of liability desired for each of the aircraft described in the attached "Schedule of Aircraft" shall be specified.

General

Insurance shall attach no earlier than the commercial insurance terminates or at such time as may be specified in the policy.

If application is for insurance with premium, the rate of premium and the amount of any deductible shall be fixed by the Federal Aviation Administrator, acting for the Secretary of Transportation. The registration fee for insurance without premium is $200 per aircraft listed on the "Schedule of Aircraft" and is not returnable unless application is rejected. Registration fees are due upon application or revision of the "Schedule of Aircraft" adding aircraft and are payable by check to the Federal Aviation Administration.

The application shall be accompanied by copies of any commercial insurance policy and any company plan of self-insurance applicable to the aircraft listed in the "Schedule of Aircraft."

The "Schedule of Aircraft" attached to policies without premium may be revised from time to time by agreement of the Federal Aviation Administrator and the insured and with the approval of the Federal agency on whose behalf contract air services are to be performed, to add aircraft or to add contracts.

The application also shall be accompanied by a statement which shall be considered to be incorporated in the application and to form a part thereof, and which shall be signed by the same corporate official who signs the application on behalf of the applicant. The statement shall show that the applicant:

(a) Controls and operates the aircraft listed in the attached "Schedule of Aircraft," and if application is for insurance without premium, has committed such aircraft to the above indicated contract(s);

(b) Is maintaining and has maintained during the 6-month period preceding this application (or since the aircraft was acquired if acquired during the 6-month period) insurance, including demonstrable self-insurance, covering possible injury, loss or damage in amounts which equal or exceed the insurance coverages requested in the application; and

(c) Cannot obtain insurance of the type requested on reasonable terms and conditions from companies authorized to engage in an insurance business in a State of the United States or the District of Columbia or has partial commercial insurance coverage, but is unable to obtain the additional needed insurance of the type requested on reasonable terms and conditions from such commercial sources.

Verification shall include evidence of premium rate history, the names of the commercial insurance carriers which have been contacted and the premium rates quoted by such carriers which applicant considers not reasonable, and any conditions or limitations which those carriers would impose or have imposed, such as evidence of cancellation or notice of cancellation, which would cause their insurance to be inapplicable to some or all of the operations by aircraft listed in the "Schedule of Aircraft."

If the application is for insurance with respect to a foreign-flag aircraft, it shall be accompanied by the statement setting forth the registration number(s) of the aircraft, the nationality of registration, and the name of the owner or lessee.

The insurance applied for hereunder shall not cover risks to persons or property engaged or transported exclusively in operations between two points in the United States as defined in section 101(41) of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1301 (41)).

Applicant warrants that the particulars herein are true and complete to the best of his or her knowledge and that no information has been withheld or suppressed.

Applicant agrees that this application, including all attachments hereto and all revisions of the "Schedule of Aircraft" hereinafter accepted by the Government and the terms and conditions of the form of policy prescribed by the Federal Aviation Administrator, acting for the Secretary of Transportation, will constitute the basis of any contract between him or her and the United States of America.

Applicant ______________________

By ______________________

____

(Name and Title)

Date ______________________

SCHEDULE OF AIRCRAFT

HULL INSURANCE

Make, model, and configuration (passenger, cargo, or convertible)	FAA identification No. or equivalent	Amount of hull insurance desired for each aircraft	Amount for which each aircraft is currently insured (including self-insurance)	Loss payee

HULL INSURANCE—Continued

Make, model, and configuration (passenger, cargo, or convertible)	FAA identification No. or equivalent	Amount of hull insurance desired for each aircraft	Amount for which each aircraft is currently insured (including self-insurance)	Loss payee

LIABILITY INSURANCE

(Exclusive of cargo)	
Amount requested per occurrence	Amount of insurance (including self-insurance) in effect per occurrence

LIABILITY TO CARGO

Amount requested	Amount of insurance (including self-insurance) in effect per occurrence

EFFECTIVE DATE NOTE: Part 198 was revised at 50 FR 51336, Dec. 16, 1985, effective January 15, 1986. For the convenience of the user, the text remaining in effect until January 15, 1986, is set forth below.

PART 198—WAR RISK INSURANCE

Subpart A—General

Sec.
198.1 Eligibility of aircraft for insurance.
198.2 Change in status of an aircraft after interim binders have been issued.
198.3 Applications for insurance and payment of binding fees.
198.4 Time of attachment of insurance.
198.5 Premiums and payment thereof.
198.6 War risk insurance underwriting agents.
198.7 Modifications.

Subpart B—War Risk Hull Insurance

198.100 Amounts of insurance for which application may be made.
198.101 Form of application.
198.102 Issuance of interim binder; its terms and conditions.
198.103 Sums which will be insured.
198.104 Calculation of premiums.
198.105 Additional war risk hull insurance.
198.106 Standard forms of war risk hull insurance interim binders.
198.107 Standard forms of war risk hull insurance policies.

Subpart C—War Risk Liability Insurance, Exclusive of Cargo Liability

198.200 Limits of liability insurance for which application may be made.
198.201 Form of applications.
198.202 Issuance of interim binder; its terms and conditions.
198.203 Sums which will be insured.
198.204 Calculation of premiums.
198.205 Standard forms of war risk liability insurance, exclusive of cargo liability, interim binders.
198.206 Standard forms of war risk liability insurance, exclusive of cargo liability, policies.

Subpart D—War Risk Carriers Liability to Cargo Insurance

198.300 Limits of liability insurance for which application may be made.
198.301 Form of applications.
198.302 Issuance of interim binder; its terms and conditions.
198.303 Sums which will be insured.
198.304 Calculation of premiums.
198.305 Standard forms of war risk carriers liability to cargo insurance interim binders.
198.306 Standard forms of war risk carriers liability to cargo insurance policies.
198.307 Effect on other General Orders—War Risk Insurance.

APPENDIX A—FORMS OF APPLICATION, NAMED IN § 198.101

APPENDIX B—STANDARD FORMS OF WAR RISK HULL INSURANCE INTERIM BINDERS, NAMED IN § 198.106

APPENDIX C—STANDARD FORMS OF WAR RISK HULL INSURANCE POLICIES, NAMED IN § 198.107

APPENDIX D—STANDARD FORMS OF WAR RISK LIABILITY INSURANCE, EXCLUSIVE OF CARGO LIABILITY, POLICIES, NAMED IN § 198.206

APPENDIX E—FORMS OF APPLICATION, NAMED IN § 198.301

APPENDIX F—STANDARD FORMS OF WAR RISK CARRIERS LIABILITY TO CARGO INSURANCE INTERIM BINDERS, NAMED IN § 198.305

AUTHORITY: Sec. 1307, 72 Stat. 803; 49 U.S.C. 1537, 1655.

SOURCE: Docket No. 8605, 32 FR 20843, Dec. 28, 1967, unless otherwise noted.

Subpart A—General

§ 198.1 Eligibility of aircraft for insurance.

An aircraft is eligible for insurance if it is:

(a) An American aircraft as defined in section 1301(a), Title XIII of the Federal Aviation Act of 1958, as amended; or

(b) A foreign-flag aircraft engaged in aircraft operations deemed by the Federal Aviation Administrator to be in the interest of the national defense or the national economy of the United States.

§ 198.2 Change in status of an aircraft after interim binders have been issued.

In the event that an aircraft shall cease to come within either § 198.1(a) or (b) after any interim binders named in §§ 198.106, 198.205, and 198.305 have been issued, interim binders covering such an aircraft shall automatically terminate. In the event of sale, lease, confiscation, requisition, or total loss of an aircraft, or any other change in the status, which by the terms of the binder causes same to terminate, prompt notice shall be given in writing to the Federal Aviation Administrator.

§ 198.3 Applications for insurance and payment of binding fees.

Applications for war risk hull and war risk liability, exclusive of cargo, insurance, shall be filed on the same form in duplicate, and applications for war risk carriers liability to cargo insurance shall be filed on a separate form, also in duplicate. Applications for insurance on those foreign-flag aircraft referred to in § 198.1 shall be accompanied by a signed statement in quadruplicate, setting forth the dates of the applications, the forms of insurance applied for, the identification number of the aircraft, its flag, the name of the owner or lessee, the operations in which the aircraft is engaged and the reason such operations should be considered to be in the interest of the national defense or national economy of the United States, which statement shall be deemed to be a part of each application for insurance filed with respect to such aircraft. Applications shall be made to the Federal Aviation Administrator, Department of Transportation, 800 Independence Avenue SW., Washington, D.C. 20590. A check payable to the Treasurer of the United States for the total amount of all binding fees payable by each applicant shall accompany the applications. Binding fees are not returnable unless applications are rejected.

§ 198.4 Time of attachment of insurance.

The war risk insurance to be provided under this part shall attach:

(a) In the case of premium insurance, not earlier than the date and hour commercial war risk insurance terminates by reason of the operation of the "24-hour automatic termination clause," whether or not the aircraft was covered by such commercial insurance; and

(b) In the case of nonpremium insurance, as specified in the binder or policy.

§ 198.5 Premiums and payment thereof.

The rates of premium for insurance shall be subject to review and revision by the Federal Aviation Administrator each calendar month, and the Federal Aviation Administrator may deem it appropriate to fix premium surcharges or rate loadings. Premiums shall accrue upon the fixing of the rates by the Federal Aviation Administrator, and shall be payable within 10 days after receipt of notice of the amounts thereof by the Insured. Premiums shall be paid to the Federal Aviation Administrator by check payable to the order of the Treasurer of the United States.

§ 198.6 War risk insurance underwriting agents.

Applications from companies or groups of companies authorized to do an aviation insurance business in any State of the United States for appointment as underwriting agents will not be received until the Federal Aviation Administrator finds that it is practical to employ such companies as underwriting agents. The Federal Aviation Administrator will promulgate, and publish in the FEDERAL REGISTER, the forms and agreements required for the appointment of underwriting agents.

§ 198.7 Modifications.

The provisions of this part may be amended or modified at any time by the Federal Aviation Administrator.

Subpart B—War Risk Hull Insurance

§ 198.100 Amounts of insurance for which application may be made.

An applicant for war risk hull insurance shall state the amount of insurance desired, but any payment for damage to or total loss of the aircraft will be made as provided in § 198.103.

§ 198.101 Form of application.

Applications submitted shall be in strict accordance with one of the forms set forth in Appendix A of this part, as follows:

(a) Application for Premium War Risk Hull and Liability, Exclusive of Cargo, Insurance, FAA Form 2000-2 (12-67) (supersedes UST Form No. WRI-1 (9-63)).

(b) Application for Nonpremium War Risk Hull and Liability, Exclusive of Cargo, Insurance, FAA Form 2000-2.1 (12-67) (supersedes UST Form No. WRI-1B (9-63)).

(c) Application for Nonpremium War Risk Hull and Liability, Exclusive of Cargo, Insurance, FAA Form 2000-2.2 (12-67) (supersedes UST Form No. WRI-1C (9-63)).

§ 198.102 Issuance of interim binder; its terms and conditions.

Upon acceptance of an application, an interim binder in the form of one of those named in § 198.106 will be issued and there shall be deemed to be incorporated therein by reference, all of the terms, conditions and warranties contained in the standard war risk hull insurance policy to be prescribed by the Federal Aviation Administrator pursuant to the provisions of § 198.107, to the same extent as if such policy were made a part of the binder. The binding fee shall be $200 per aircraft.

[Doc. No. 8605, 32 FR 20843, Dec. 28, 1967, as amended by Amdt. 198-1, 35 FR 17038, Nov. 5, 1970]

§ 198.103 Sums which will be insured.

The sum insured, in each instance, may not exceed the amount in effect on the date of application by which the air carrier has insured, or self-insured, the aircraft against risks other than war risks: *Provided*, That such amount is not in excess of the "fair and reasonable value of the aircraft" within the meaning of section 1307(a) of the Federal Aviation Act of 1958, as amended.

§ 198.104 Calculation of premiums.

Premiums will be calculated on the basis of the applicable premium rate multiplied by the dollar amount of insurance in force during the period under consideration.

§ 198.105 Additional war risk hull insurance.

Persons having insurable interests in aircraft may obtain, on an excess basis, additional war risk hull insurance in such amounts as desired, and such insurance shall not inure to the benefit of the Federal Aviation Administrator as underwriter.

§ 198.106 Standard forms of war risk hull insurance interim binders.

The standard forms of war risk hull insurance interim binders for premium and nonpremium war risk hull insurance are set forth in Appendix B of this part, as follows:

(a) Interim Binder No. PR H&LWR, FAA Form 2000-3 (12-67) (supersedes UST Form No. WRI-2 (9-63)).

(b) Interim Binder No. NON PR-H&LWR, FAA Form 2000-3.1 (12-67) (supersedes UST Form No. WRI-2C (9-63)).

§ 198.107 Standard forms of war risk hull insurance policies.

The standard form of war risk hull insurance policy, FAA Form 2000-4 (12-67) (supersedes UST Form No. WRI-3B (9-63)), is set forth in Appendix C of this part.

Subpart C—War Risk Liability Insurance, Exclusive of Cargo Liability

§ 198.200 Limits of liability insurance for which application may be made.

Applicants for war risk liability insurance, exclusive of cargo liability, shall state the limits of liability desired, but such limits shall not exceed the corresponding amounts in effect on the date of application by which the Insured has insured, or self-insured, itself against liability arising from risks other than war risks involving the following coverages:

(a) Bodily injury or death (excluding passengers).

(b) Property damage.

(c) Bodily injury or death (passengers).

(d) Baggage and personal effects.

§ 198.201 Form of applications.

Applications submitted shall be in strict accordance with the forms named in § 198.101.

§ 198.202 Issuance of interim binder; its terms and conditions.

Upon acceptance of an application, there will be issued either an interim binder or a policy in the form of one of those named in § 198.106, § 198.107, or § 198.206, and there shall be deemed to be incorporated in the interim binder by reference all of the terms, conditions and warranties contained in the standard war risk liability insurance, exclusive of cargo liability, policy prescribed or to be prescribed by the Federal Aviation Administrator, pursuant to the provisions of § 198.206, to the same extent as if such policy were made a part of the binder. The binding fee of $200.00 per aircraft set forth in § 198.102 for war risk hull insurance shall also cover the cost of binding war risk liability insurance, exclusive of cargo liability.

[Doc. No. 8605, 32 FR 20843, Dec. 28, 1967, as amended by Amdt. 198-1, 35 FR 17038, Nov. 5, 1970]

§ 198.203 Sums which will be insured.

The sums insured shall not exceed the limits prescribed in § 198.200.

§ 198.204 Calculation of premiums.

Premiums for Bodily Injury or Death (Excluding Passengers) and Property Damage liability will be calculated by multiplying the applicable premium rate by airplane miles. Premiums for Bodily Injury or Death, Baggage and Personnal Effects liability will be calculated by multiplying the applicable premium rate by passenger miles.

§ 198.205 Standard forms of war risk liability insurance, exclusive of cargo liability, interim binders.

The standard forms of war risk liability insurance, exclusive of cargo liability, interim binders for premium and non-premium insurance shall be those named in § 198.106.

§ 198.206 Standard forms of war risk liability insurance, exclusive of cargo liability, policies.

The standard form of war risk liability insurance, exclusive of cargo liability, policy, FAA Form 2000-5 (12-67) (supersedes UST Form No. WRI-4B (9-63)), is set forth in Appendix D of this part.

Subpart D—War Risk Carriers Liability to Cargo Insurance

§ 198.300 Limits of liability insurance for which application may be made.

Applicants for war risk carriers liability to cargo insurance shall state the limits of liability desired, but the limit for any one accident shall not exceed $1 million.

§ 198.301 Form of applications.

Applications submitted shall be in strict accordance with one of the forms set forth in Appendix E of this part, as follows:

(a) Application for Premium War Risk Carriers Liability to Cargo Insurance, FAA Form 2000-6 (12-67) (supersedes UST Form No. WRI-6 (9-63)).

(b) Application for Nonpremium War Risk Carriers Liability to Cargo Insurance, FAA Form 2000-6.1 (12-67) (Supersedes UST Form No. WRI-6A (9-63)).

§ 198.302 Issuance of interim binder; its terms and conditions.

Upon acceptance of an application, and interim binder in the form of one of those named in § 198.305 will be issued, and there shall be deemed to be incorporated therein by reference all of the terms, conditions and warranties contained in the standard war risk carriers liability to cargo insurance policies to be prescribed by the Federal Aviation Administrator, pursuant to the provisions of § 198.306, to the same extent as if such policies were made a part of the binder. The binding fee shall be $50.00 per aircraft.

[Doc. No. 8605, 32 FR 20843, Dec. 28, 1967 as amended by Amdt. 198-1, 35 FR 17038 Nov. 5, 1970]

§ 198.303 Sums which will be insured.

The sums insured shall be those stated in the application, but the liability for any one accident shall not exceed $1 million.

§ 198.304 Calculation of premiums.

Premiums will be calculated by multiplying the applicable premium rate by the gross revenue received by the Insured for the transportation of cargo.

§ 198.305 Standard forms of war risk carriers liability to cargo insurance interim binders.

The standard forms of carriers liability to cargo insurance interim binders for premium and nonpremium war risk carriers liability to cargo insurance are set forth in Appendix F of this part, as follows:

(a) Interim Binder No. PR-CLWR, FAA Form 2000-7 (12-67) (supersedes UST Form No. WRI-7 (9-63)).

(b) Interim Binder No. NON-PR- CLWR, FAA Form 2000-7.1 (12-67) (supersedes UST Form No. WRI-7A (9-63)).

§ 198.306 Standard forms of war risk carriers liability to cargo insurance policies.

Standard forms of war risk carriers liability to cargo insurance policies for premium and nonpremium insurance will be prescribed by the Federal Aviation Administrator, and published in the FEDERAL REGISTER as an amendment to this section.

§ 198.307 Effect on other General Orders—War Risk Insurance.

This part supersedes all General Orders—War Risk Insurance previously issued.

APPENDIX A—FORMS OF APPLICATION, NAMED IN § 198.101

The application forms that must be used under § 198.101 are as follows:

(a) *FAA Form 2000-2 (12-67) (supersedes UST Form No. WRI-1 (9-63)).*

UNITED STATES OF AMERICA

DEPARTMENT OF TRANSPORTATION, FEDERAL AVIATION ADMINISTRATION

Application for Premium War Risk Hull and Liability, Exclusive of Cargo, Insurance

Application is made for premium War Risk Hull and Liability, exclusive of Cargo, Insurance, pursuant to Title XIII of the Federal Aviation Act of 1958, as amended, and in accordance with all provisions of law and subject to all limitations thereof, on the aircraft described in the attached Schedule of Aircraft, with the understanding that this application does not commit the Government to any liability or make the applicant liable for any premium unless insurance is effected by the Federal Aviation Administrator.

Name of applicant ——————————

Address ——————————

Applicant's interest in aircraft described is that of ——————————

——————————

Mortgage, or other encumbrance, if any ——

——————————

Hull loss, if any, payable to ——————

——————————

Hull

Amounts set forth in the attached "Schedule of Aircraft" as representing the amount of war risk hull insurance desired for each such aircraft shall not exceed the amount in effect on the date of this application, by which the applicant has insured, or self-insured, that aircraft against risks other than war risks.

Liability

The type of coverage required for the aircraft described in the attached "Schedule of Aircraft" shall be indicated and the limits of liability for each such coverage shall be specified in the schedule, but such limits shall not exceed the corresponding amounts in effect on the date of this application by which the applicant has insured, or self-insured, itself against liability arising from risks other than war risks.

General

Insurance to attach, in the event of outbreak of war between any of the four Great Powers (France, Great Britain and/or any of the British Commonwealth of Nations, the Union of Soviet Socialist Republics and the United States of America), at and from 24 hours from midnight G.M.T. of the day on which such outbreak of war occurs. Nevertheless, should the aircraft:

(1) Be in the air when such outbreak of war occurs, or

(2) Being at an airport depart therefrom as a measure of safety in respect of an insured peril within 24 hours of such outbreak of war, this insurance shall not attach until midnight G.M.T. of the day on which the aircraft lands wherever such landing may be regardless of whether or not accidental damage has been sustained by the aircraft.

If this application is for insurance with respect to a foreign-flag aircraft, it shall be accompanied by the statement specified in § 198.3 of the regulations of the Federal Aviation Administrator (14 CFR Part 198) which statement shall be deemed to be part of this application.

Binding fee (not returnable unless application is rejected) is $200.00 per aircraft.

Check payable to the Treasurer of the United States for the total amount of all binding fees enclosed herewith.

Rate of premium shall be fixed by the Federal Aviation Administrator, acting for the Secretary of Transportation.

The war risk insurance applied for hereunder shall not cover war risks on persons or property engaged or transported exclusively in the air commerce within the several States of the United States and the District of Columbia.

Applicant warrants that the particulars herein are true and complete to the best of his knowledge and that no information has been withheld or suppressed.

Applicant agrees that this application and the terms and conditions of the form of policy prescribed by the Federal Aviation Administrator, acting for the Secretary of Transportation, will constitute the basis of any contract between him and the United States of America.

Applicant ——————————

By ——————————

(Name and Title)

Date ——————

Type of coverage	Each person amount requested	Each occurrence amount requested	Insurance (including self-insurance) in effect for risks other than war risks	
			Each person	Each occurrence
( ) Bodily injury or death (excluding passengers)				
( ) Property damage				

Type of coverage	Each person amount requested	Each occurrence amount requested	Insurance (including self-insurance) in effect for risks other than war risks	
			Each person	Each occurrence
( ) Bodily injury or death (passengers)				
( ) Baggage and personal effects				

SCHEDULE OF AIRCRAFT—TO BE ATTACHED TO FAA FORM 2000-2 (12-67)

Make, model and configuration (passenger, cargo, or convertible)	FAA identification No. or equivalent	Amount of war risk hull insurance desired for each aircraft	Amount for which each aircraft is currently insured (including self-insurance) for risks other than war risks

(b) FAA Form 2000-2.1 (12-67) (Supersedes UST Form No. WRI-1B (9-63)).

UNITED STATES OF AMERICA

DEPARTMENT OF TRANSPORTATION, FEDERAL AVIATION ADMINISTRATION

Application for Nonpremium War Risk Hull and Liability, Exclusive of Cargo, Insurance.

Application is made for War Risk Hull and Liability, exclusive of Cargo, insurance, without premium, pursuant to Title XIII of the Federal Aviation Act of 1958, as amended, and in accordance with all provisions of law and subject to all limitations thereof, on the aircraft described in the attached "Schedule of Aircraft and Government Contracts," while being operated under the air transportation contract(s) with the Department of Defense, referred to in such schedule, with the understanding that this application does not commit the Government to any liability unless insurance is effected by the Federal Aviation Administrator.

Name of applicant ——————————
Address ——————————
Applicant's interest in aircraft described is that of

—————— ——————

Mortgage, or other encumbrance, if any

——————————

Hull loss, if any, payable to ——————

——————————

Hull

Amounts set forth in the attached "Schedule of Aircraft and Government Contracts" as representing the amount of war risk hull insurance desired for each such aircraft shall not exceed the amount, in effect on the date of this application, by which the applicant has insured, or self-insured, that aircraft against risks other than war risks.

Liability

The type of coverage required for the aircraft described in the attached "Schedule of Aircraft and Government Contracts" shall be indicated and the limits of liability for each such coverage shall be specified in the schedule, but such limits shall not exceed the corresponding amounts in effect on the date of this application by which the applicant has insured, or self-insured, itself against liability arising from risks other than war risks

The application shall be accompanied by copies of any commercial war risk insurance policy and any company plan of self-insurance applicable to the aircraft listed in the "Schedule of Aircraft and Government Contracts."

The application shall also be accompanied by a statement signed, in his personal capacity, by the same corporate official who signs the application on behalf of the applicant, which statement shall be considered to be incorporated in the application and to form a part thereof. The statement shall show that the applicant:

(a) Controls and operates the aircraft listed in the attached "Schedule of Aircraft and Government Contracts" and that such aircraft are committed, under the contracts listed in such schedule, to the Department of Defense for use during an air transportation emergency;

(b) Cannot obtain war risk insurance of the type requested on reasonable terms and conditions from companies authorized to do an insurance business in a State of the United States, or has partial commercial insurance coverage against war risks, but is unable to obtain the additional needed insurance of the type requested on reasonable terms and conditions from such commercial sources;

(c) Is maintaining and has maintained during the 6-month period preceding this application (or since the aircraft was acquired if acquired during the 6-month period) insurance, including demonstrable self-insurance, covering possible injury, loss or damage from risks other than war risks in amounts which equal or exceed the war risk insurance coverages requested in the application; and

(d) Shall name the commercial insurance carriers which have been contacted and the premium rates quoted by such carriers which he considers not reasonable, and any conditions or limitations which those carriers would impose in connection with war risk insurance which would cause their insurance to be inapplicable to some or all of the operations under the Government contracts listed in the "Schedule of Aircraft and Government Contracts."

General

Insurance to attach at the time and date specified in the Policy issued pursuant to this application.

The war risk insurance applied for hereunder shall not cover war risks on persons or property engaged or transported exclusively in air commerce within the several States of the United States and the District of Columbia.

The "Schedule of Aircraft and Government Contracts" attached hereto may be revised from time to time by agreement of the Federal Aviation Administrator and the Insured and with the approval of the Military Air Transport Service to add aircraft or to add contracts.

Applicant warrants that the particulars herein are true and complete to the best of his knowledge and that no information has been withheld or suppressed.

Applicant agrees that this application, including all attachments hereto, all revisions of such schedule hereinafter accepted by the Government and the terms and conditions of the policies issued by the Federal Aviation Administrator, acting for the Secretary of Transportation, for war risk hull and liability, exclusive of cargo, insurance, will constitute the basis of any contract between him and the United States of America. Binding fee (not returnable unless application is rejected) is $200.00 per aircraft listed on the "Schedule of Aircraft and Government Contracts," or any revision of such schedule adding aircraft.

Check payable to the Treasurer of the United States for the total amount of all binding fees enclosed herewith.

Applicant ——————————
By ——————————
(Name and Title)
Date ——————

(Application must be signed by a responsible corporate official authorized to sign the application and to agree, for the Insured, in changes to the schedule.)

SCHEDULE OF AIRCRAFT AND GOVERNMENT CONTRACTS—TO BE ATTACHED TO FAA FORMS 2000-2.1, 2000-4, AND 2000-5 (12-67)

[Aircraft]

Make, model and configuration (passenger, cargo, or convertible)	FAA identification No. or equivalent	Amount of war risk hull insurance desired for each aircraft	Amount for which each aircraft is currently insured (including self-insurance) for risks other than war risks
Contracts with the military air transport service in effect for overseas or foreign transportation:			

[Liability]

Type of coverage	Each person amount requested	Each occurrence amount requested	Insurance (including self-insurance) in effect for risks other than war risks	
			Each person	Each occurrence
( ) Bodily injury or death (excluding passengers)				
( ) Property damage				
( ) Bodily injury or death (passengers)				
( ) Baggage and personal effects				

(c) *FAA Form 2000-2.2 (12-67) (supersedes UST Form No. WRI-1C (9-63)).*

UNITED STATES OF AMERICA

DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

Application for Nonpremium War Risk Hull and Liability, Exclusive of Cargo, Insurance

Application is made for War Risk Hull and Liability, exclusive of Cargo, Insurance, without premium, pursuant to Title XIII of the Federal Aviation Act of 1958, as amended, and in accordance with all provisions of law and subject to all limitations thereof, on the aircraft described in the attached Schedule of Aircraft, with the understanding that this application does not commit the Government to any liability unless insurance is effected by the Federal Aviation Administrator.

Name of Applicant ——————————

Address ——————————————

Date and number of Applicant's Department of State contract(s) ——————

Applicant's interest in aircraft described is that of ——————————————

Mortgage, or other encumbrance, if any ——

——————————————————

Hull loss, if any, payable to ——————

——————————————————

Hull

Amounts set forth in the attached "Schedule of Aircraft" as representing the amount of war risk hull insurance desired for each such aircraft shall not exceed the amount in effect on the date of this application, by which the applicant has insured, or self-insured, that aircraft against risks other than war risks.

Liability

The type of coverage required for the aircraft described in the attached "Schedule of Aircraft" shall be indicated and the limits of liability for each such coverage shall be specified in the schedule, but such limits shall not exceed the corresponding amounts in effect on the date of this application by which the applicant has insured, or self-insured itself against liability arising from risks other than war risks.

Type of coverage	Each person amount requested	Each occurrence amount requested	Insurance (including self insurance) in effect for risks other than war risks	
			Each person	Each occurrence
( ) Bodily injury or death (excluding passengers)				
( ) Property damage				
( ) Bodily injury or death (passengers)				
( ) Baggage and personal effects				

General

Insurance to attach while the aircraft described in the attached schedule are being operated under applicant's Department of State contract(s) No. — —, dated ———.

Binding fee (not returnable unless application is rejected) is $200.00 per aircraft.

Check payable to the Treasurer of the United States for the total amount of all binding fees enclosed herewith.

The war risk insurance applied for hereunder shall not cover war risks on persons or property engaged or transported exclusively in air commerce within the several States of the United States and the District of Columbia.

Applicant warrants that the particulars herein are true and complete to the best of his knowledge and that no information has been withheld or suppressed.

Applicant agrees that this application and the terms and conditions of the form of policy prescribed by the Federal Aviation Administrator, acting for the Secretary of Transportation, for war risk hull and liability, exclusive of cargo, insurance provided to U.S. air carriers having agreements with the Department of State will constitute the basis of any contract between him and the United States of America.

Applicant ——————————

By ——————————

(Name and title)

Date ————————

SCHEDULE OF AIRCRAFT—TO BE ATTACHED TO FAA FORM 2000-2.2 (12-67)

Make, model and configuration (passenger, cargo, or convertible)	FAA identification No. or equivalent	Amount of war risk hull insurance desired for each aircraft	Amount for which each aircraft is currently insured (including self-insurance) for risks other than war risks

[Doc. No. 8605, 32 FR 20843, Dec. 28, 1967, as amended by Amdt. 198-1, 35 FR 17038, Nov. 5, 1970]

APPENDIX B—STANDARD FORMS OF WAR RISK HULL INSURANCE INTERIM BINDERS, NAMED IN § 198.106

The standard form Interim Binders prescribed under § 198.106 are as follows:

(a) *FAA Form 2000-3 (12-67) (supersedes UST Form No. WRI-2 (9-63)).*

UNITED STATES OF AMERICA

DEPARTMENT OF TRANSPORTATION, FEDERAL AVIATION ADMINISTRATION

Interim Binder No. PR-H&LWR

The United States of America, represented by the Federal Aviation Administrator, acting for the Secretary of Transportation, in consideration of the binding fee and premium provided for herein, hereby insures, in accordance with applicable provisions of law and subject to all limitations thereof, particularly Title XIII of the Federal Aviation Act of 1958, as amended, against Hull and Liability, exclusive of Cargo, War Risks only, subject to the conditions stated herein, on the aircraft described in the attached Schedule of Aircraft.

Name of Insured ——————————

Address ——————————

Hull loss if any, payable to ——————————

——————————

Hull

Amounts set forth in the "Schedule of Aircraft" attached to the Insured's application for premium war risk hull and liability, exclusive of cargo, insurance, a copy of which is attached hereto and made a part hereof, as representing the amount of war risk hull insurance desired for each of such aircraft, shall be deemed to be the "sum insured"; *Provided*, This amount, in each instance, may not exceed either (i) the amount determined by the Federal Aviation Administrator in accordance with the provisions of section 1307(a), Title XIII of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1537(a)), or (ii) the amount in effect on the date of application for this insurance by which the Insured has insured, or self-insured, that aircraft against risks other than war risks covered by this binder.

Liability

Insurance of the type indicated and in the limits shown below is provided in respect to each of the aircraft shown in the attached "Schedule of Aircraft":

Type of coverage	Each person	Each occurrence
Bodily injury or death (excluding passengers)	$	$
Property damage		$
Bodily injury or death (passengers)	$	$
Baggage and personal effects		$

The above amounts may not exceed the corresponding amounts in effect on the date of application for this insurance by which the Insured has insured, or self-insured, itself against similar liabilities arising from risks other than war risks covered by this binder.

General

Attaching in the event of outbreak of war between any of the four Great Powers (France, Great Britain and/or any of the British Commonwealth of Nations, the Union of Soviet Socialist Republics and the United States of America), at and from 24 hours from midnight G.M.T. of the day on which such outbreak of war occurs. Nevertheless, should the aircraft:

(1) Be in the air when such outbreak of war occurs, or

(2) Being at an airport depart therefrom as a measure of safety in respect to an insured peril within 24 hours of such outbreak of war, this insurance shall not attach until midnight G.M.T. of the day on which the aircraft lands wherever such landing may be regardless of whether or not accidental damage has been sustained by the aircraft.

This binder shall terminate:

(a) Upon expiration of the authority of the Secretary of Transportation to provide War Risk Insurance under Title XIII of the Federal Aviation Act of 1958, as amended, or

(b) Three years from its date, or

(c) Five days after telegraphic notice of cancellation has been dispatched to the Insured by the Federal Aviation Administrator, or

(d) Upon the issuance of a policy by the Federal Aviation Administrator with respect to any insurance bound herein which is covered by that policy, whichever shall occur first.

The Insured agrees that if the amounts of insurance, or self-insurance, carried against loss, damage, or liability arising from risks other than war risks are voluntarily reduced to amounts less than the amounts of insurance provided by this binder, the insurance under this binder shall be considered to have been automatically reduced to the new amounts at the time of such reduction.

The insurance provided hereunder does not cover any war risks on persons or property engaged or transported exclusively in air commerce within the several States of the United States and the District of Columbia.

There shall be deemed to be incorporated herein all of the terms, conditions, and warranties contained in the applicable war risk hull and war risk liability, exclusive of cargo, insurance policies prescribed by the Federal Aviation Administrator pursuant to the provisions of §§ 198.107 and 198.206, respectively, of the regulations of the Federal Aviation Administrator (14 CFR Part 198).

The premium rate for this insurance shall be subject to review and revision by the Federal Aviation Administrator each calendar month. Unless the revised premium rate is accepted in writing by the Insured within 10 days after dispatch of notice of the amount thereof, the insurance provided hereunder shall automatically terminate at the end of such 10-day period. Premium at the new revised rate shall be charged for the 10-day period during which this insurance remained in force, unless the Federal Aviation Administrator receives notice within such period of the refusal of the insured to accept such new revised premium rate, in which event premium at the new revised rate shall be charged for that portion of the 10-day period prior to receipt of such notice. Upon receipt of such notice of nonacceptance, the insurance provided hereunder shall terminate, notwithstanding any other provision for cancellation in this binder. In the event this insurance is cancelled, or otherwise terminated, and not replaced by a policy, there shall be a premium charge hereunder for the period during which this insurance has been in force. Premium payments shall be made to the Federal Aviation Administrator by check payable to the order of the Treasurer of the United States of America.

In the event of any loss covered by this binder, prompt notice thereof shall be given by the Insured to the Federal Aviation Administrator, but failure to give such prompt notice because of wartime conditions or regulations shall not prejudice this insurance. The Insurer shall be subrogated to all rights which the Insured may have against any other person or entity in respect of any payment made under this binder to the extent of such payment, and the Insured shall, upon the request of the Insurer, execute all documents necessary to secure such rights to the Insurer.

Warranted that during the period of this binder and the term of any insurance attaching hereunder the aircraft is (1) an American aircraft as defined in section 1301(a), Title XIII of the Federal Aviation Act of 1958, as amended, or (2) a foreign-flag aircraft engaged in aircraft operations deemed by the Federal Aviation Administrator to be in the interest of the national defense or the national economy of the United States, and if, at any time during the binder period or after insurance attached hereunder, the aircraft shall cease to come within either (1) or (2) above, this binder and insurance provided hereunder shall automatically terminate at the time of such change with respect to such aircraft, without return of premium unless the Federal Aviation Administrator agrees otherwise.

UNITED STATES OF AMERICA

By FEDERAL AVIATION ADMINISTRATOR, ACTING FOR THE SECRETARY OF TRANSPORTATION.

———————————————

(FEDERAL AVIATION ADMINISTRATOR)

Date ———————————————

(b) *FAA Form 2000-3.1 (12-67) (supersedes UST Form No. WRI-2C (9-63)).*

UNITED STATES OF AMERICA

DEPARTMENT OF TRANSPORTATION, FEDERAL AVIATION ADMINISTRATION

Interim Binder No. NON-PR-H&LWR

The United States of America, represented by the Federal Aviation Administrator, acting for the Secretary of Transportation, in consideration of the agreement of the Secretary of State to indemnify the Secretary of Transportation against all losses covered by war risk insurance provided, without premium, for United States air carriers having agreements with the Department of State for the continuation of regularly scheduled service or the provision of charter service, and in consideration of the binding fee provided for herein, hereby insures, in accordance with applicable provisions of law and subject to all limitations thereof, particularly Title XIII of the Federal Aviation Act of 1958, as amended, against Hull and Liability, exclusive of Cargo, War Risks only, subject to the conditions stated herein, on the aircraft described in the attached Schedule of Aircraft while being operated by the Insured under Department of State contract(s) No. ———, dated ———.

Name of Insured ———————————————

Address ———————————————

Hull loss, if any, payable to ———————————————

———————————————

Hull

Amounts set forth in the "Schedule of Aircraft" attached to the Insured's application for war risk hull and liability, exclusive of cargo, insurance, without premium, a copy of which is attached hereto and made a part hereof, as representing the amount of war risk hull insurance desired for each of such aircraft, shall be deemed to be the "sum insured": *Provided,* This amount, in each instance, may not exceed either (i) the amount determined by the Federal Aviation Administrator in accordance with the provisions of section 1307(a), Title XIII of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1537(a)), or (ii) the amount in effect on the date of application for this insurance by which the Insured has insured, or self-insured, that aircraft against risks other than war risks covered by this binder.

Liability

Insurance of the type indicated and in the limits shown below is provided in respect to each of the aircraft shown in the attached "Schedule of Aircraft":

Type of coverage	Each person	Each occurrence
Bodily injury or death (excluding passengers)	$	$
Property damage		$
Bodily injury or death (passengers)	$	$
Baggage and personal effects		$

The above amounts may not exceed the corresponding amounts in effect on the date of application for this insurance by which the Insured has insured, or self-insured, itself against similar liabilities arising from risks other than war risks covered by this binder.

General

Attaching when the Insured commences performance of services under Department of State contract(s) No. ———, dated ————.

This binder shall terminate:

(a) Upon expiration of the authority of the Secretary of Transportation to provide War Risk Insurance under Title XIII of the Federal Aviation Act of 1958, as amended, or

(b) Three years from its date, or

(c) Upon expiration or cancellation of the Insured's Department of State contract(s) No. ———, dated ————, or

(d) Five days after telegraphic notice of cancellation has been dispatched to the Insured by the Federal Aviation Administrator, or

(e) Upon the issuance of a policy by the Federal Aviation Administrator, with respect to any insurance bound herein which is covered by that policy, whichever shall occur first.

The Insured agrees that if the amounts of insurance, or self-insurance, carried against loss, damage, or liability arising from risks other than war risks are voluntarily reduced to amounts less than the amounts of insurance provided by this binder, the insurance under this binder shall be considered to have been automatically reduced to the new amounts at the time of such reduction.

The insurance provided hereunder does not cover any war risks on persons or property engaged or transported exclusively in air commerce within the several States of the United States and the District of Columbia.

There shall be deemed to be incorporated herein all of the terms, conditions, and warranties contained in the applicable war risk hull and war risk liability, exclusive of cargo, insurance policies prescribed by the Federal Aviation Administrator pursuant to the provisions of §§ 198.107 and 198.206, respectively, of the regulations of the Federal Aviation Administrator (14 CFR Part 198).

In the event of any loss covered by this binder, prompt notice thereof shall be given by the Insured to the Federal Aviation Administrator, but failure to give such prompt notice because of wartime conditions or regulations shall not prejudice this insurance. The Insurer shall be subrogated to all rights which the Insured may have against any other person or entity in respect to any payment made under this binder to the extent of such payment, and the Insured shall, upon the request of the Insurer, execute all documents necessary to secure such rights to the Insurer.

Warranted that during the period of this binder and the term of any insurance attaching hereunder the aircraft is an American aircraft as defined in section 1301(a), Title XIII of the Federal Aviation Act of 1958, as amended, and if at any time during the binder period or after insurance attaches hereunder, the aircraft shall cease to be an American aircraft as so defined, or ceases to be under the agreement with the Department of State, this binder and insurance provided hereunder shall automatically terminate at the time of such change with respect to such aircraft, without return of binding fee unless the Federal Aviation Administrator agrees otherwise.

UNITED STATES OF AMERICA

By FEDERAL AVIATION ADMINISTRATOR, ACTING FOR THE SECRETARY OF TRANSPORTATION.

————————————————

(Federal Aviation Administrator)

Date ————————

APPENDIX C—STANDARD FORMS OF WAR RISK HULL INSURANCE POLICIES, NAMED IN § 198.107

The standard form policy prescribed under § 198.107 is as follows:

FAA Form 2000-4 (12-67) (supersedes UST Form No. WRI-3B (9-63)).

UNITED STATES OF AMERICA

DEPARTMENT OF TRANSPORTATION,

FEDERAL AVIATION ADMINISTRATION

Policy No. NON-PR-HWR ———

The United States of America (hereinafter referred to as the Insurer), represented by the Federal Aviation Administrator, acting for the Secretary of Transportation, by this Policy of Insurance, in accordance with applicable provisions of law and subject to all limitations thereof, particularly Title XIII of the Federal Aviation Act of 1958, as amended, and in consideration of the agreement of the Secretary of Defense to indemnify the Secretary of Transportation against all losses covered by War Risk Insurance provided, without premium, for U.S. air carriers having air transportation contracts with the Department of Defense and the payment of binding fees, does insure, without premium, the aircraft described in the attached "Schedule of Aircraft and Government Contracts" for the account of ———— (hereinafter referred to as the Insured) while being operated by the Insured under a contract listed in the Schedule.

Loss, if any, payable to ————————

Amounts set forth in the "Schedule of Aircraft and Government Contracts" attached to the Insured's application for war risk hull and liability, exclusive of cargo, insurance, without premium, a copy of which is attached hereto and made a part hereof, as representing the amount of war risk hull insurance desired for each of such aircraft shall be deemed to be the "sum insured"; *Provided*, This amount, in each instance, may not exceed either (i) the amount determined by the Federal Aviation Administrator in accordance with the provisions of section 1307(a), Title XIII of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1537(a)), or (ii) the amount in effect on the date of application for this insurance by which the Insured has insured, or self-insured, that aircraft against risks other than war risks covered by this Policy.

The Insured agrees that if the amount of insurance or self-insurance, carried against loss or damage from risks other than war risks is voluntarily reduced to an amount less than the amount of insurance provided by this Policy, the insurance under this Policy shall be considered to have been automatically reduced to the new amounts at the time of such reduction.

The "Schedule of Aircraft and Government Contracts" attached hereto may be revised from time to time by agreement of the Federal Aviation Administrator and the Insured and with approval of the Military Air Transport Service to add aircraft or to add contracts.

The insurance covers from ———M., e.s.t. of the ——— day of ————, 19— until cancelled or terminated in accordance with the terms of this Policy.

This insurance covers all physical loss or damage to the aircraft described and set forth in the "Schedule of Aircraft and Government Contracts" attached hereto, including engines, navigational instruments, parts and equipment usually carried on said aircraft, resulting from the risks which would be excluded from a commercial Aviation Hull Policy by the following clause:

"Loss or damage due to or resulting from: (1) Capture, seizure, arrest, restraint or detention or the consequences thereof or of any attempt thereat, or any taking of the property insured or damage to or destruction thereof by any Government or governmental authority or agent (whether secret or otherwise) or by any military, naval or usurped power, whether any of the foregoing be done by way of requisition or otherwise and whether in time of peace or war and whether lawful or unlawful; (2) war, invasion, civil war, revolution, rebellion, insurrection or warlike operations, whether there be a declaration of war or not."

Notwithstanding anything contained in the foregoing clause, this insurance does not cover any loss or damage caused by or resulting from capture, seizure, arrest, restraint, detainment, preemption, confiscation or requisition by the Government of the United States, or from arrest, restraints, or detainments under Customs or quarantine regulations or similar arrests, restraints, or detainments not arising from actual or impending hostilities or sanctions.

The Insurer will pay, subject to the terms and conditions of this Policy: (1) In respect to total loss, the insured value of the aircraft, and (2) in respect to partial loss:

(a) If repairs are made by other than the Insured, the cost to repair the damaged property with material of like kind and quality, plus the reasonable cost of transporting new and/or damaged parts and/or the damaged aircraft to place of repair and the return of the repaired aircraft to place of accident or home airport, whichever be nearer.

(b) If repairs are made by the Insured, the total of the following items:

I. Actual cost of material or parts of like kind and quality.

II. Actual wages paid for direct labor, excluding extra charges for overtime.

III. A reasonable percentage of Item II in lieu of all overhead, including supervisory services, or actual overhead costs as determined by the Federal Aviation Administrator.

IV. The reasonable cost of transporting new and/or damaged parts and/or the damaged aircraft to place of repair and return of the repaired aircraft to place of accident or home airport, whichever be nearer.

(c) If repairs are not made and the aircraft is subsequently lost, then the estimated cost of making such repairs to the damaged property with material of like kind and quality.

The amount due under this Policy in respect to a partial loss shall not exceed the amount due were the loss payable as a total loss. Where the amount paid hereunder is equal to the amount payable as a total loss, any salvage value remaining shall inure to the benefit of the Insurer. There shall, however, be no abandonment without the consent of the Insurer.

The sum insured shall be reduced by the amount of any loss or damage, whether or not covered by this Policy, until repairs have been completed.

In the event of any loss covered by this Policy, prompt notice thereof, on being known to the Insured, shall be given by the Insured to the Federal Aviation Administrator, but failure to give such prompt notice because of wartime conditions or regulations shall not prejudice this insurance.

Within sixty (60) days after loss or damage, the Insured shall render to the Federal Aviation Administrator a proof of loss signed and sworn to by the Insured, stating the place, time and cause of the loss or damage, the interest of the Insured and of all others in the property, the sound value thereof, the amount and nature of the loss or damage, all encumbrances thereon, all changes in title, and all other insurance covering said property whether valid and collectible or not.

The Insurer shall be subrogated to all the rights which the Insured may have against any other person or entity, in respect of any payment made under this Policy, to the extent of such payment, and the Insured shall upon the request of the Insurer, execute all documents necessary to secure to the Insurer such rights.

The insurance provided hereunder covers only loss or damage to the aircraft described in the attached "Schedule of Aircraft and Government Contracts" while the aircraft is being operated by the Insured, during the Policy period, under a contract listed in that Schedule when the loss or damage occurs. Such operations under the listed contracts shall be deemed to include ferry flights to position or deposition the aircraft, provided that on such ferry flight the aircraft does not carry any passengers, cargo or mail for remuneration or hire, and provided further that such ferry flight is operated nonstop (i) to the point of origin of the military traffic flight or (ii) from the point of destination of the military traffic flight back to the point of origin, or to a maintenance base normally used by the Insured, or to a point where the Insured intends to place the aircraft in commercial or military service.

The insurance provided hereunder does not cover any war risks on aircraft engaged exclusively in air commerce within the several States of the United States and the District of Columbia.

This Policy shall terminate:

(a) Upon expiration of the authority of the Secretary of Transportation to provide War Risk Insurance under Title XIII of the Federal Aviation Act of 1958, as amended, or

(b) Five (5) days after telegraphic notice of cancellation has been dispatched to the Insured by the Federal Aviation Administrator, or

(c) As to any aircraft or contract upon the date specified in a notice from the Insured to the Federal Aviation Administrator requesting such cancellation, or

(d) As to any aircraft or contract five (5) days after telegraphic notice of cancellation has been dispatched to the Insured by the Federal Aviation Administrator with the approval of the Military Air Transport Service.

Warranted free from any claim for loss, damage or expense covered under any commercial policy in effect for the benefit of the Insured. This Policy may be cancelled, in whole or in part, by the Federal Aviation Administrator if comparable insurance becomes obtainable on reasonable terms and conditions from companies authorized to do an insurance business in a State of the United States. The Insured agrees that it will promptly notify the Federal Aviation Administrator of any significant change in the terms and conditions under which insurance of the type provided by this Policy is obtainable from such sources.

Warranted during the term of this insurance the aircraft insured hereunder are American aircraft as defined in section 1301 (a), Title XIII of the Federal Aviation Act of 1958, as amended, and if at any time during such term an aircraft shall cease to be an American aircraft as so defined, the insurance provided hereunder shall automatically terminate at the time of such change with respect to such aircraft without the return of binding fee unless the Federal Aviation Administrator agrees otherwise.

UNITED STATES OF AMERICA

By FEDERAL AVIATION ADMINISTRATOR, ACTING FOR THE SECRETARY OF TRANSPORTATION.

____

(Federal Aviation Administrator)

Date______________________

NOTE: Additional standard forms of war risk hull insurance policies will be prescribed by the Federal Aviation Administrator, and published in the FEDERAL REGISTER as an amendment to § 198.107 and this appendix.

APPENDIX D—STANDARD FORMS OF WAR RISK LIABILITY INSURANCE, EXCLUSIVE OF CARGO LIABILITY, POLICIES, NAMED IN § 198.206

The standard form policy prescribed under § 198.206 is as follows:

FAA Form 2000-5 (12-67) (supersedes UST Form No. WRI-4B (9-63)).

UNITED STATES OF AMERICA

DEPARTMENT OF TRANSPORTATION, FEDERAL AVIATION ADMINISTRATION

Policy No. NON-PR-LWR ___

The United States of America (hereinafter the Federal Aviation Administrator, acting for the Secretary of Transportation, by this policy of insurance, in accordance with applicable provisions of law and subject to all limitations thereof, particularly Title XIII of the Federal Aviation Act of

1958, as amended, and in consideration of the agreement of the Secretary of Defense, to indemnify the Secretary of Transportation against all losses covered by War Risk Insurance provided, without premium, for U.S. air carriers having air transportation contracts with the Department of Defense and the payment of binding fees, does insure, without premium, ——— (hereinafter referred to as the Insured) as specified in this Policy.

Insurance of the type indicated and in the limits shown below is provided in respect to each of the aircraft shown in the "Schedule of Aircraft and Government Contracts," attached hereto and made a part hereof, while being operated by the Insured under a contract listed in such schedule. The "Schedule of Aircraft and Government Contracts" may be revised from time to time by agreement of the Federal Aviation Administrator and the Insured and with the approval of the Military Air Transport Service to add aircraft or to add contracts.

Type of coverage	Each person	Each occurrence
Bodily injury or death (excluding passengers)	$	$
Property damage		$
Bodily injury or death (passengers)	$	$
Baggage and personal effects		$

The above amounts may not exceed the corresponding amounts in effect on the date of application for this insurance by which the Insured has insured, or self-insured, itself against similar liability arising from risks other than the war risks covered by this Policy.

The Insured agrees that if the amounts of insurance, or self-insurance, carried against liabilities arising from such other risks are reduced to amounts less than the amounts of insurance provided by this Policy, the insurance under this Policy shall be considered to have been automatically reduced to the new amounts at the time of such reduction.

The insurance covers from ——— M., e.s.t. of the ——— day of ———, 19— , until cancelled or terminated in accordance with the terms of this Policy.

Subject to the limits of liability, exclusions, conditions and other terms of this Policy, the Insurer hereby agrees to pay on behalf of the Insured all sums which the Insured shall be legally liable to pay and shall pay or by final judgment be adjudged to pay to any person or persons, including damages for care and loss of services, for personal injuries sustained including death at any time resulting therefrom, or by reason of loss or damage to or destruction of property, including the loss of use thereof (but including property owned, rented, leased, in charge of, or transported by the Insured other than passenger baggage), in respect of the aircraft described and set forth in the attached "Schedule of Aircraft and Government Contracts" (each aircraft separately insured), while such aircraft are being operated by the Insured under the contracts listed in the Schedule, resulting from the risks which would be excluded from a commercial Aviation Liability Policy by the following clause:

"Any liability arising out of occurrence due directly or indirectly to war, invasion, insurrection, military, naval or usurped power, or by order of any civil authority."

Notwithstanding anything contained in the foregoing clause, this insurance does not cover any loss or damage or any legal liability arising out of or caused by or resulting from capture, seizure, arrest, restraint, detainment, preemption, confiscation or requisition by the Government of the United States, or from arrests, restraints, or detainments under Customs or quarantine regulations or similar arrests, restraints or detainments not arising from actual or impending hostilities or sanctions.

The Insured shall, unless directed otherwise by the Insurer, defend in its name and behalf any suit against it alleging such injury or destruction and seeking damages on account thereof, even if such suit is groundless, false or fraudulent, but the Insurer shall at its election have the right to participate in or conduct such defense and to make such investigation, negotiation and settlement of any claim or suit as may be deemed expedient by the Insurer.

The Insurer shall reimburse the Insured, if suit is defended by the Insured, for: All premiums on bonds to release attachments for an amount not in excess of the applicable limits of liability of this Policy, all premiums on appeal bonds required in such suit, all costs taxed against the Insured in such suit, all expenses incurred by the Insured, all interest accruing after entry of judgment until the Insurer has paid, tendered or deposited in court such part of such judgment as does not exceed the limit of the Insurer's liability thereon: *Provided*, That the Insurer shall pay only such expenses incurred as a result of a claim covered by this Policy.

In the event of any happening which may result in loss, damage or expense for which the Insurer may become liable, prompt notice thereof, on being known to the Insured, shall be given by the Insured to the Federal Aviation Administrator, but failure to give such prompt notice because of wartime emergency conditions or regulations shall not prejudice this insurance.

If claim is made or suit is brought against the Insured, the Insured shall immediately forward to the Insurer a copy of every demand, notice, summons or other process received by him or his representatives.

The Insured shall not make any admission of liability, either before or after any occurrence which may result in a claim for which the Insurer may be liable. The Insured shall not interfere in any negotiations of the Insurer for settlement of any legal proceedings in respect of any occurrence for which the Insurer is liable under this Policy: *Provided, however,* That in respect of any occurrence likely to give rise to a claim under this Policy, the Insured is obligated to and shall take such steps to protect his and the Insurer's interests as would reasonably be taken in the absence of this or similar insurance.

Whenever required by the Insurer, the Insured shall aid in securing information and evidence and in obtaining witnesses and shall cooperate with the Insurer in the defense of any claim or suit or in the appeal from any judgment, in respect of any occurrence as hereinbefore provided.

No action shall lie against the Insurer unless as a condition precedent thereto the Insured shall have fully complied with all of the terms of this Policy, nor until the amount of the Insured's obligation to pay shall have been finally determined either by judgment against the Insured after actual trial or by written agreement of the Claimant and the Insurer. Any person or organization or the legal representative thereof who has secured such judgment or written agreement shall thereafter be entitled to recover under this Policy to the extent such judgment or written agreement is not in excess of the insurance afforded by this Policy. Nothing contained in this Policy shall give any person or organization any right to join the Insurer as a codefendant in any action against the Insured to determine the Insured's liability. Bankruptcy or insolvency of the Insured or of the Insured's estate shall not relieve the Insurer of any of its obligations hereunder.

The Insurer shall be subrogated to all the rights which the Insured may have against any other person or entity, in respect of any payment made under this Policy, to the extent of such payment, and the Insured shall, upon the request of the Insurer, execute all documents necessary to secure to the Insurer such rights.

The insurance provided hereunder applies only to the aircraft described in the attached "Schedule of Aircraft and Government Contracts" while the aircraft involved is being operated by the Insured, during the Policy period, under a contract listed in that Schedule when the injury, loss or damage leading to the liability occurs. Such operations under the listed contracts shall be deemed to include ferry flights to position or deposition the aircraft, provided that on such ferry flight the aircraft does not carry any passengers, cargo or mail for remuneration or hire, and provided further that such ferry flight is operated nonstop (i) to the point of origin of the military traffic flight or (ii) from the point of destination of the military traffic flight back to the point of origin, or to a maintenance base normally used by the Insured, or to a point where the Insured intends to place the aircraft in commercial or military service.

The insurance provided hereunder does not cover any liability under the provisions of Pub. L. 267, 64th Congress, approved September 7, 1916, known as the Federal Employees Compensation Act.

The insurance provided hereunder does not apply to persons or property engaged or transported exclusively in air commerce within the several States of the United States and the District of Columbia.

This Policy shall terminate:

(a) Upon expiration of the authority of the Secretary of Transportation to provide War Risk Insurance under Title XIII of the Federal Aviation Act of 1958, as amended, or

(b) Five (5) days after telegraphic notice of cancellation has been dispatched to the insured by the Federal Aviation Administrator, or

(c) As to any aircraft or contract upon the date specified in a notice from the Insured to the Federal Aviation Administrator requesting such cancellation, or

(d) As to any aircraft or contract five (5) days after telegraphic notice of cancellation has been dispatched to the Insured by the Federal Aviation Administrator, with the approval of the Military Air Transport Service.

Warranted free from any claim for loss, damage or expense covered under any commercial policy in effect for the benefit of the Insured. This Policy may be canceled, in whole or in part, by the Federal Aviation Administrator if comparable insurance becomes obtainable on reasonable terms and conditions from companies authorized to do an insurance business in a State of the United States. The Insured agrees that it will promptly notify the Federal Aviation Administrator of any significant change in the terms and conditions under which insurance of the type provided by this Policy is obtainable from such commercial sources.

Warranted that during the term of this insurance the aircraft insured hereunder are American aircraft as defined in section 1301(a), Title XIII of the Federal Aviation Act of 1958, as amended, and if at any time during such term an aircraft shall cease to be an American aircraft as so defined, the insurance provided hereunder shall automatically terminate at the time of such change with respect to such aircraft without return of binding fee unless the Federal Aviation Administrator agrees otherwise.

UNITED STATES OF AMERICA

BY FEDERAL AVIATION ADMINISTRATOR ACTING FOR THE SECRETARY OF TRANSPORTATION.

(Federal Aviation Administrator)

Date ____________

NOTE: Additional standard forms of war risk hull insurance policies will be prescribed by the Federal Aviation Administrator, and published in the FEDERAL REGISTER as an amendment to § 198.206 and this appendix.

APPENDIX E—FORMS OF APPLICATION, NAMED IN § 198.301

The application forms that must be used under § 198.301 are as follows:

(a) *FAA Form 2000-6 (12-67) (supersedes UST Form No. WRI-6 (9-63))*.

UNITED STATES OF AMERICA

DEPARTMENT OF TRANSPORTATION, FEDERAL AVIATION ADMINISTRATION

Application for Premium War Risk Carriers Liability to Cargo Insurance

Application is made for Premium War Risk Carriers Liability to Cargo Insurance, pursuant to Title XIII of the Federal Aviation Act of 1958, as amended, and in accordance with all provisions of law and subject to all limitations thereof, on the aircraft described in the attached Schedule of Aircraft, with the understanding that this application does not commit the Government to any liability or make the applicant liable for any premium unless insurance is effected by the Federal Aviation Administrator.

Name of applicant ________________

Address ________________

Loss, if any, payable to ________________

Limits of liability desired for each of the aircraft described in the attached Schedule of Aircraft shall be specified, but the limit for any one accident shall not exceed $1 million.

Insurance to attach, in the event of outbreak of war between any of the four Great Powers (France, Great Britain and/or any of the British Commonwealth of Nations, the Union of Soviet Socialist Republics and the United States of America), at and from 24 hours from midnight G.M.T. of the day on which such outbreak of war occurs. Nevertheless, should the aircraft:

(1) Be in the air when such outbreak of war occurs, or

(2) Being at an airport depart therefrom as a measure of safety in respect to an insured peril within 24 hours of such outbreak of war,

this insurance shall not attach until midnight G.M.T. of the day on which the aircraft lands wherever such landing may be regardless of whether or not accidental damage has been sustained by the aircraft.

If this application is for insurance with respect to a foreign-flag aircraft, it shall be accompanied by the statement specified in § 198.3 of the regulations of the Federal Aviation Administrator (14 CFR Part 198) which statement shall be deemed to be a part of this application.

Binding fee (not returnable unless application is rejected) is $50.00 per aircraft.

Check payable to the Treasurer of the United States for the total amount of all binding fees enclosed herewith.

Rate of premium shall be fixed by the Federal Aviation Administrator, acting for the Secretary of Transportation.

The war risk insurance applied for hereunder shall not cover war risks on property (cargo) transported exclusively in air commerce within the several States of the United States and the District of Columbia.

Applicant warrants that the particulars herein are true and complete to the best of his knowledge and that no information has been withheld or suppressed.

Applicant agrees that this application and the terms and conditions of the form of policy prescribed by the Federal Aviation Administrator, acting for the Secretary of Transportation, will constitute the basis of any contract between him and the United States of America.

Applicant ________________

By ________________

(Name and Title)

Date ____________

SCHEDULE OF AIRCRAFT—TO BE ATTACHED TO FAA FORM 2000-6 (12-67)

Make, model, and configuration (passenger, cargo or convertible)	FAA identification No. or equivalent	Limits of liability desired for each aircraft

SCHEDULE OF AIRCRAFT—TO BE ATTACHED TO FAA FORM 2000-6 (12-67)—Continued

Make, model, and configuration (passenger, cargo or convertible)	FAA identification No. or equivalent	Limits of liability desired for each aircraft

(b) *FAA Form 2000-6.1 (12-67) (supersedes UST Form No. WRI-6A (9-63))*.

UNITED STATES OF AMERICA

DEPARTMENT OF TRANSPORTATION, FEDERAL AVIATION ADMINISTRATION

Application for Nonpremium War Risk Carriers Liability to Cargo Insurance

Application is made for War Risk Carriers Liability to Cargo Insurance, without premium, pursuant to Title XIII of the Federal Aviation Act of 1958, as amended, and in accordance with all provisions of law and subject to all limitations thereof, on the aircraft described in the attached Schedule of Aircraft, with the understanding that this application does not commit the Government to any liability unless insurance is effected by the Federal Aviation Administrator.

Name of applicant ————————————
Address ————————————————
Date and number of applicant's Department of State contract(s) ——————————
——————————————————
Loss, if any, payable to ——————————
——————————————————

Limits of liability desired for each of the aircraft described in the attached Schedule of Aircraft shall be specified but the limit for any one accident shall not exceed $1 million.

Insurance to attach while the aircraft described in the attached Schedule ar being operated by the applicant under its Department of State contract(s) No ————————, dated ——————

Binding fee (not returnable unless application is rejected) is $50.00 per aircraft.

Check payable to the Treasurer of the United States for the total amount of all binding fees enclosed herewith.

The war risk insurance applied for hereunder shall not cover war risks on property (cargo) transported exclusively in air commerce within the several States of the United States and the District of Columbia.

Applicant warrants that the particulars herein are true and complete to the best of his knowledge and that no information has been withheld or suppressed.

Applicant agrees that this application and the terms and conditions of the form of policy prescribed by the Federal Aviation Administrator, acting for the Secretary of Transportation, for war risk carriers liability to cargo insurance provided to U.S. air carriers having agreements with the Department of State, will constitute the basis of any contract between him and the United States of America.

Applicant ————————————
By ————————————
(Name and Title)
Date ——————

SCHEDULE OF AIRCRAFT—TO BE ATTACHED TO FAA FORM 2000-6.1 (12-67)

Make, model, and configuration (passenger, cargo, or convertible)	FAA identification No. or equivalent	Limits of liability desired for each aircraft

[Doc. No. 8605, 32 FR 20843, Dec. 28, 1967, as amended by Amdt. 198-1, 35 FR 17038, Nov. 5, 1970]

APPENDIX F—STANDARD FORMS OF WAR RISK CARRIERS LIABILITY TO CARGO INSURANCE INTERIM BINDERS, NAMED IN § 198.305

The standard from Interim Binders prescribed under § 198.305 are as follows:

(a) *FAA Form 2000-7 (12-67) (supersedes UST Form No. WRI-7 (9-63))*.

UNITED STATES OF AMERICA

DEPARTMENT OF TRANSPORTATION, FEDERAL AVIATION ADMINISTRATION

Interim Binder No. PR-CLWR

The United States of America, represented by the Federal Aviation Administrator acting for the Secretary of Transportation, in consideration of the binding fee and premium provided for herein, hereby insures, in accordance with applicable provisions of law and subject to all limitations thereof, particularly Title XIII of the Federal Aviation Act of 1958, as amended, against Carriers Liability to Cargo War Risks only, subject to the conditions stated herein, on the aircraft described in the attached Schedule of Aircraft.

Name of Insured ______
Address ______
Loss, if any, payable to ______

______

Limits of liability set forth in the Schedule of Aircraft attached to the Insured's application for premium war risk carriers liability to cargo insurance, a copy of which is attached hereto and made a part hereof, as representing the limits of liability insurance desired for each of such aircraft shall be the sums insured, but liability for any one accident shall not exceed $1 million.

Attaching in the event of outbreak of war between any of the four Great Powers (France, Great Britain and/or any of the British Commonwealth of Nations, the Union of Soviet Socialist Republics and the United States of America) at and from 24 hours from midnight G.M.T. of the day on which such outbreak of war occurs. Nevertheless, should the aircraft:

(1) Be in the air when such outbreak of war occurs, or

(2) Being at an airport depart therefrom as a measure of safety in respect to an insured peril within 24 hours of such outbreak of war,

this insurance shall not attach until midnight G.M.T. of the day on which the aircraft lands wherever such landing may be regardless of whether or not accidental damage has been sustained by the aircraft.

This binder shall terminate:

(a) Upon expiration of the authority of the Secretary of Transportation to provide War Risk Insurance under Title XIII of the Federal Aviation Act of 1958, as amended, or

(b) Three years from its date, or

(c) Five days after telegraphic notice of cancellation has been dispatched to the Insured by the Federal Aviation Administrator, or

(d) Upon the issuance of a policy by the Federal Aviation Administrator with respect to any insurance bound herein which is covered by that policy, whichever shall occur first.

The insurance provided hereunder does not cover any war risks on property (cargo) transported exclusively in air commerce within the several States of the United States and the District of Columbia.

There shall be deemed to be incorporated herein all of the terms, conditions, and warranties contained in the applicable war risk carriers liability to cargo insurance policies prescribed by the Federal Aviation Administrator pursuant to the provisions of § 198.306 of the regulations of the Federal Aviation Administrator (14 CFR Part 198).

The premium rate for this insurance shall be subject to review and revision by the Federal Aviation Administrator each calendar month. Unless the revised premium rate is accepted in writing by the Insured within ten days after dispatch of notice of the amount thereof, the insurance provided hereunder shall automatically terminate at the end of such ten day period. Premium at the new revised rate shall be charged for the ten day period during which this insurance remained in force, unless the Federal Aviation Administrator receives notice within such period of the refusal of the Insured to accept such new revised premium rate, in which event premium at the new revised rate shall be charged for that portion of the ten day period prior to receipt of such notice. Upon receipts of such notice of nonacceptance, the insurance provided hereunder shall terminate, notwithstanding any other provision for cancellation in this binder. In the event this insurance is cancelled, or otherwise terminated, and not replaced by a policy, there shall be a premium charge hereunder for the period during which this insurance has been in force. Premium payments shall be made to the Federal Aviation Administrator by check payable to the order of the Treasurer of the United States of America.

In the event of any loss covered by this binder, prompt notice thereof shall be given by the Insured to the Federal Aviation Administrator, but failure to give such prompt notice because of wartime conditions or regulations shall not prejudice this insurance.

The Insurer shall be subrogated to all rights which the Insured may have against any other person or entity in respect of any payment made under this binder to the extent of such payment, and the Insured shall, upon the request of the Insurer, execute all documents necessary to secure such rights to the Insurer.

Warranted that during the period of this binder and the term of any insurance attaching hereunder the aircraft is (1) an

American aircraft as defined in section 1301(a), Title XIII of the Federal Aviation Act of 1958, as amended, or (2) a foreign-flag aircraft engaged in aircraft operations deemed by the Federal Aviation Administrator to be in the interest of the national defense or the national economy of the United States, and if, at any time during the binder period or after insurance attaches hereunder, the aircraft shall cease to come within either (1) or (2) above, or ceases to be operated by the Insured, this binder and insurance provided hereunder shall automatically terminate at the time of such change with respect to such aircraft, without return of premium unless the Federal Aviation Administrator agrees otherwise.

United States of America

By Federal Aviation Administrator, acting for the Secretary of Transportation.

____

(Federal Aviation Administrator)

Date____________

(b) *FAA Form 2000-7.1 (12-67) (supersedes UST Form No. WRI-7-A (9-63)).*

United States of America

Department of Transportation, Federal Aviation Administration

Interim Binder No. NON-PR-CLWR

The United States of America, represented by the Federal Aviation Administrator, acting for the Secretary of Transportation, in consideration of the agreement of the Secretary of State to indemnify the Secretary of Transportation against all losses covered by war risk insurance provided, without premium, for U.S. air carriers having agreements with the Department of State for the continuation of regularly scheduled service or the provision of charter service, and in consideration of the binding fee provided for herein hereby insures, in accordance with applicable provisions of law and subject to all limitations thereof, particularly Title XIII of the Federal Aviation Act of 1958, as amended, against Carriers Liability to Cargo War Risks only, subject to the conditions stated herein, on the aircraft described in the attached Schedule of Aircraft to be operated by the Insured under Department of State contract(s) No. ____, dated ________.

Name of Insured ________________

Address ________________________

Loss, if any, payable to ____________

Limits of liability set forth in the Schedule of Aircraft attached to the Insured's application for war risk carriers liability to cargo insurance, without premium, a copy of which is attached hereto and made a part hereof, as representing the limits of liability insurance desired for each of such aircraft shall be the sums insured, but liability for any one accident shall not exceed $1 million.

Attaching while the aircraft described in the schedule are being operated by the Insured under its Department of State contract(s) No. ____, dated ________.

This binder shall terminate:

(a) Upon expiration of the authority of the Secretary of Transportation to provide War Risk Insurance under Title XIII of the Federal Aviation Act of 1958, as amended, or

(b) Three years from its date, or

(c) Upon expiration or cancellation of the Insured's agreement(s) with the Department of State dated __________, or

(d) Five days after telegraphic notice of cancellation has been dispatched to the Insured by the Federal Aviation Administrator, or

(e) Upon the issuance of a policy by the Federal Aviation Administrator with respect to any insurance bound herein which is covered by that policy, whichever shall occur first.

The insurance provided hereunder does not cover any war risks on property (cargo) transported exclusively in air commerce within the several States of the United States and the District of Columbia.

There shall be deemed to be incorporated herein all of the terms, conditions, and warranties contained in the applicable war risk carriers liability to cargo insurance policies prescribed by the Federal Aviation Administrator pursuant to the provisions of § 198.306 of the regulations of the Federal Aviation Administrator (14 CFR Part 198).

In the event of any loss covered by this binder, prompt notice thereof shall be given by the Insured to the Federal Aviation Administrator, but failure to give such prompt notice because of wartime conditions or regulations shall not prejudice this insurance. The Insurer shall be subrogated to all rights which the Insured may have against any other person or entity in respect to any payment made under this binder to the extent of such payment, and the Insured shall, upon the request of the Insurer, execute all documents necessary to secure such rights to the Insurer.

Warranted that during the period of this binder and the term of any insurance attaching hereunder the aircraft is an American aircraft as defined in section 1301(a), Title XIII of the Federal Aviation Act of 1960, as amended, and if, at any time during the binder period or after insurance attaches hereunder the aircraft shall cease to be an American aircraft as so defined, or ceases to be under the agreement with the

Department of State, this binder and insurance provided hereunder shall automatically terminate at the time of such change with respect to such aircraft without return of binding fee unless the Federal Aviation Administrator agrees otherwise.

UNITED STATES OF AMERICA.

By FEDERAL AVIATION ADMINISTRATOR, ACTING FOR THE SECRETARY OF TRANSPORTATION.

(Federal Aviation Administrator)

Date ————

SUBCHAPTER O—AIRCRAFT LOAN GUARANTEE PROGRAM

PART 199—AIRCRAFT LOAN GUARANTEE PROGRAM

Sec.

199.1 Applicability.
199.3 Definitions.
199.5 Carriers eligible for an aircraft loan guarantee.
199.7 Alaska and Hawaii.
199.9 Loans made within the Act.
199.11 Conditions and limitations under which loans will be guaranteed.
199.13 National policy considerations.
199.15 Priorities among otherwise eligible guarantee recipients.
199.17 Terms and conditions of loan.
199.19 Applications.
199.21 Action taken on applications.
199.23 Fees.
199.25 Deviation from terms of agreement or guarantee.
199.27 Delegation of Administrator's functions.
199.29 Notices.
199.31 Full faith and credit.
APPENDIX A—PRIORITIES AMONG LOAN GUARANTEE APPLICANTS

AUTHORITY: Act of Sept. 7, 1957 (49 U.S.C. 1324 Note; 82 Stat. 1003), as amended, Pub. L. 95-504, secs. 6(a)(3)(A) and 9 of the Dept. of Transportation Act (49 U.S.C. 1655(a)(3)(A) and 1657) and sec. 1.4(b)(4) of the Regulations of the Office of the Secretary of Transportation (49 CFR 1.4(b)(4)), unless otherwise noted.

SOURCE: Docket No. 18694, 44 FR 44809, July 30, 1979, unless otherwise noted.

§ 199.1 Applicability.

This part applies to applications for aircraft loan guarantees as provided by the Act of September 7, 1957 (40 U.S.C. 1324 Note), and as extended by Pub. L. 90-568 (82 Stat. 1003) and 95-504, and to requests for approval of deviations from the terms of guarantee and loan agreements concluded after September 7, 1957.

§ 199.3 Definitions.

Act, as used in this part means the Act of September 7, 1957 (49 U.S.C. 1324 Note) as amended.

Carrier, as used in this part, includes air carrier, charter air carrier, commuter air carrier and intra-state carrier as these terms are defined in the Act of September 7, 1957, as amended.

Short-term financing, means any loan the term of which is less than one year.

§ 199.5 Carriers eligible for an aircraft loan guarantee.

(a) Only those carriers set forth in section 3 of the Act are eligible for loan guarantee assistance.

(b) Only those carriers identified in (a) above who are directly engaged in air transportation are eligible for loan guarantee assistance.

(c) Only those aircraft purchased by carriers for their own use in air transportation shall be eligible for a loan guarantee.

§ 199.7 Alaska and Hawaii.

(a) The term *major portion* as used in section 3(1) (b) and (c) of the Act means a portion which is greater than 50%.

(b) The term *operation* as used in section 3(1) (b) and (c) of the Act means a takeoff and the related subsequent landing.

(c) The term *adjacent Canadian territory* as used in section 3(1)(c) of the Act means any point in Canada which is within British Columbia or the Yukon Territory.

§ 199.9 Loans made within the Act.

(a) For purposes of determining which loans are eligible for guarantee under the Act, only those loans for which all financing documents are in final form, or in which the essential terms and conditions of the parties' legal commitments are otherwise finally established, shall be guaranteed.

(b) Loan agreements which are submitted in final form during the life of the Act shall be deemed to fall within the Act, even if loan amounts are to be paid over after expiration of the Act.

(c) No guarantee may be authorized for the refinancing of an aircraft purchase loan. This prohibition will not extend to aircraft purchase loans which liquidate short-term financing made for deposits on one or more aircraft so long as such deposits do not exceed 30% of the purchase price of the aircraft actually purchased.

§ 199.11 Conditions and limitations under which loans will be guaranteed.

(a) Subject to parapraph (b) of this section, no guarantee shall be made:

(1) Extending to more than the unpaid interest and 90% of the unpaid principal of any loan;

(2) On any loan or combination of loans for more than 90% of the purchase price of the aircraft, including spare parts, to be purchased therewith;

(3) On any loan whose terms permit full repayment more than 15 years after the date thereof;

(4) Wherein the total face amount of such loan, and of any other loans to the same carrier, or corporate predecessor of such carrier, guaranteed and outstanding under the terms of the Act exceeds $100 million;

(5) Unless the Administrator finds that, without such guarantee, in the amount thereof, the carrier would be unable to obtain necessary funds for the purchase of needed aircraft on reasonable terms as such terms are defined in § 199.17;

(6) Unless the Administrator finds that the aircraft to be purchased with the guaranteed loan is needed to improve the service and efficiency of operation of the carrier;

(7) Unless the Administrator finds that the prospective earning power—

(i) Of the applicant air carrier or charter air carrier, together with the character and value of the security pledged, furnish (A) reasonable assurances of the applicant's ability to repay the loan within the time fixed therefor, and (B) reasonable protection to the United States; and

(ii) Of the applicant commuter air carrier or intrastate air carrier, together with the character and value of the security pledged, furnish (A) reasonable assurances of the applicant's ability and intention to repay the loan within the time fixed therefor, to continue its operations as a commuter air carrier or intrastate air carrier, and to the extent found necessary by the Administrator to continue its operations as a commuter air carrier or intrastate air carrier between the same route or routes being operated by such applicant at the same time of the loan guarantee, and (B) reasonable protection to the United States; and

(8) On any loan or combination of loans for the purchases of any new turbojet-powered aircraft which does not comply with the noise standards prescribed for new subsonic aircraft in regulations issued by the Secretary of Transportation acting through the Administrator (14 CFR Part 36) as such regulations were in effect on January 1, 1977.

(b) No guarantee may be made by the Administrator under paragraph (a) of this section on any loan for the purchase of any all-cargo nonconvertible aircraft by any charter air carrier in an amount which, together with any other loans guaranteed and outstanding under this Act to such charter air carrier, or corporate predecessor of such charter air carrier, would result in the ratio of the total face amount of such loans to $100 million exceeding the ratio of the amount of charter air transportation of such charter air carrier provided to medium, small, and nonhub airports during the twelve-month period preceding the date on which the application for such guarantee is made by such charter air carrier to the total amount of charter air transportation of such air carrier during such twelve-month period.

§ 199.13 National policy considerations.

No loan which is contrary to law or to the economic, social or foreign affairs interest or policies of the United States may be guaranteed.

§ 199.15 Priorities among otherwise eligible guarantee recipients.

(a) In the administration of this program the FAA may from time to time, find it necessary to establish priorities among otherwise eligible guarantee applicants.

(b) FAA policy with respect to priorities will be published as Appendix A to this part. Changes to Appendix A will be announced, as necessary, by a general notice published in the FEDERAL REGISTER.

§ 199.17 Terms and conditions of loan.

No loan shall be guaranteed if its terms and conditions, including any default provisions, are substantially less favorable to the purchaser or guarantor than those which are available in the marketplace for similar transactions at the time of the loan.

§ 199.19 Applications.

(a) The lender shall make application for an aircraft loan guarantee under this part by filing with the Associate Administrator for Policy and International Aviation API-1 of the FAA an original and five copies of Form FAA 2950-1 and Form FAA 2950-2 prepared by the lender and air carrier, respectively, together with an original and four copies of any supporting documents. These forms may be obtained from the Federal Aviation Administration, Associate Administrator for Policy and International Aviation API-1, 800 Independence Avenue, SW., Washington, D.C. 20591.

(b) Application forms (FAA 2950-1 and 2950-2) shall be completed in accordance with instructions which will be mailed together with the requested applications.

(Act of Sept. 7, 1957 (49 U.S.C. 1324; 82 Stat. 1003), as amended, Pub. L. 95-504; (49 U.S.C. 106(g)) (Rev., Pub. L. 97-449, Jan. 12, 1983); and 49 CFR 1.4(c))

[Doc. No. 18694, 44 FR 44809, July 30, 1979, as amended by Amdt. 199-1, 49 FR 14930, Apr. 16, 1984]

§ 199.21 Action taken on applications.

(a) Upon receipt of a completed application the Administrator may use available services and facilities of other agencies and instrumentalities of the Federal Government in carrying out the provisions of these regulations.

(b) The Administrator may approve or disapprove applications based on whether or not the requirements and standards of these regulations have been met.

(c) Upon approval of an application, the Administrator may execute any necessary guarantee agreement and such amendments to the guarantee agreement as from time to time become necessary.

§ 199.23 Fees.

Any lender to whom a guarantee under this part is issued shall pay to the Administrator a guarantee fee computed at the rate of ¼ of one percent per annum (based on the actual number of days elapsed) on the average daily amount of the guaranteed portion of the unpaid principal outstanding during the interest period defined in the loan agreement.

§ 199.25 Deviation from terms of agreement or guarantee.

No deviation from the terms of any guarantee agreements made after September 7, 1957, or from the terms of any underlying loan agreements approved as a part of a loan guarantee transaction shall be made without prior review of each deviation and approval by the Administrator. An original and four copies of requests for such approval, and an original and two copies of any supporting documents, shall be filed with the Associate Administrator for Policy and International Aviation API-1 of the FAA.

(Act of Sept. 7, 1957 (49 U.S.C. 1324; 82 Stat. 1003), as amended, Pub. L. 95-504; (49 U.S.C. 106(g)) (Rev., Pub. L. 97-449, Jan. 12, 1983); and 49 CFR 1.4(c))

[Doc. No. 18694, 44 FR 44809, July 30, 1979, as amended by Amdt. 199-1, 49 FR 14930, Apr. 16, 1984]

§ 199.27 Delegation of Administrator's functions.

The function of the Administrator under this part are exercised by the Associate Administrator for Policy and International Aviation API-1 of the FAA in consultation with the Chief Counsel of the FAA.

(Act of Sept. 7, 1957 (49 U.S.C. 1324; 82 Stat. 1003), as amended, Pub. L. 95-504; (49 U.S.C. 106(g)) (Rev., Pub. L. 97-449, Jan. 12, 1983); and 49 CFR 1.4(c))

[Doc. No. 18694, 44 FR 44809, July 30, 1979, as amended by Amdt. 199-1, 49 FR 14930, Apr. 16, 1984]

§ 199.29 Notices.

All correspondence required by this part shall be addressed to the Associate Administrator for Policy and International Aviation API-1, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, D.C. 20591.

(Act of Sept. 7, 1957 (49 U.S.C. 1324; 82 Stat. 1003), as amended, Pub. L. 95-504; 49 U.S.C. 106(g) (Rev., Pub. L. 97-449, Jan. 12, 1983); and 49 CFR 1.4(c))

[Doc. No. 18694, 44 FR 44809, July 30, 1979, as amended by Amdt. 199-1, 49 FR 14930, Apr. 16, 1984]

§ 199.31 Full faith and credit.

Any guarantee which is issued pursuant to this part shall be secured by and entitled to the full faith and credit of the United States.

APPENDIX A—PRIORITIES AMONG LOAN GUARANTEE APPLICANTS

(1) Scope. This appendix contains priorities for otherwise eligible loan guarantee applicants under the FAA's Aircraft Loan Guarantee Program.

(2) Priorities. In the event that, by reason of law or public policy, a limitation is placed or becomes necessary upon the dollar amount or number of guarantees made under the Act, the FAA will set aside a portion of the available guarantee assistance as determined by the Administrator for the first or exclusive use of commuter air carriers. The nonsetaside portion of available assistance will be allocated to eligible carriers in the order of their demonstrated service to the smaller communities. In determining service to smaller communities, FAA will consider first the service rendered to those communities designated as eligible for essential air service by the Civil Aeronautics Board under § 419 of the Federal Aviation Act; then to service rendered to non-hub communities as that term is defined in the latest edition of the publication entitled "Airport Activity Statistics of Certificated Route Air Carriers," and finally, to service rendered to "small hubs," as defined in that publication. In establishing the size of the set aside portion in any fiscal year, the Administrator will take into account the air transportation needs of the United States; the views of the Congress as they may, from time to time, be expressed; and the basic purposes of the Act, and of Pub. L. 95-504.

FINDING AIDS

A list of CFR titles, subtitles, chapters, subchapters and parts and an alphabetical list of agencies publishing in the CFR are included in the CFR Index and Finding Aids volume to the Code of Federal Regulations which is published separately and revised annually.

Material Approved for Incorporation by Reference
Table of CFR Titles and Chapters
Alphabetical List of Agencies Appearing in the CFR
List of CFR Sections Affected

BLANK PAGE

Material Approved for Incorporation by Reference

The Director of the Federal Register has approved under 5 U.S.C. 552(a) and 1 CFR Part 51 the incorporation by reference of the following publications. For more information on incorporation by reference, see the preliminary pages of this volume.

14 CFR CHAPTER I (PARTS 140–199)
FEDERAL AVIATION ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

	14 CFR
American National Standards Institute 1430 Broadway, New York, NY 10018	
International Electrotechnical Commission Pub. No. 179. Precision Sound Level Meters.	Part 150, A150.9
Federal Aviation Administration National Flight Data Center, 800 Independence Ave. SW., Washington, D.C. 20590	
Federal Aviation Administration Advisory Circulars:	
Copies of FAA Advisory Circulars are available from the addresses listed at the end of this table.	
150/5100–12 Electron Navigational Aids Approved for Funding Under the Airport Development Aid Program (ADAP) (1976).	152.11
150/5190–3A Model Airport Hazard Zoning Ordinance (1972)	152.11
150/5210–7A Aircraft Fire and Rescue Communications (1972)	152.11
150/5210–10 Airport Fire and Rescue Equipment Building Guide (1967)	152.11
150/5300–2C Airport Design Standards—Site Requirements for Terminal Navigational Facilities (Through change 1, 1976).	152.11
150/5300–4B Utility Airports—Air Access to National Transportation (Through change 1, 1976).	152.11
150/5300–6 Airport Design Standards—General Aviation Airports—Basic and General Transport (Through change 2, 1969).	152.11
150/5300–8 Planning and Design Criteria for Metropolitan STOL Ports (1970).	152.11
150/5320–5B Airport Drainage (1970)	152.11
150/5320–6B Airport Pavement Design and Evaluation (Through change 1, 1974).	152.11
150/5320–10 Environmental Enhancement at Airports—Industrial Waste Treatment (1974).	152.11
150/5320–12 Methods for the Design, Construction, and Maintenance of Skid Resistant Airport Pavement Surfaces (1975).	152.11
150/5325–2C Airport Design Standards—Airports Served by Air Carriers—Surface Gradient and Line-of-Sight (Through change 1, 1975).	152.11
150/5325–4 Runway Length Requirements for Airport Design (1977)	152.11
150/5325–6A Airport Design Standards—Effect and Treatment of Jet Blast (1972).	152.11
150/5325–8 Compass Calibration Pad (1969)	152.11

14 CFR CHAPTER I (PARTS 140–199)—Continued
FEDERAL AVIATION ADMINISTRATION, DEPARTMENT OF TRANSPORTATION—Continued

	14 CFR
150/5335–1A Airport Design Standards—Airports Served by Air Carriers—Taxiways (1970, through change 2, 1976).	152.11
150/5335–2 Airport Aprons (1965)	152.11
150/5335–3 Airport Design Standards—Airports Served by Air Carriers—Bridges and Tunnels on Airports (1971).	152.11
150/5335–4 Airport Design Standards—Airports Served by Air Carriers—Runway Geometrics (Through change 1, 1976).	152.11
150/5340–1D Marking of Paved Areas on Airports (1973)	152.11
150/5340–4C Installation Details for Runway Centerline and Touchdown Zone Lighting Systems (Through change 1, 1975).	152.11
150/5340–5A Segmented Circle Airport Marker System (1971)	152.11
150/5340–8 Airport 51-foot Tubular Beacon Tower (1964)	152.11
150/5340–14B Economy Approach Lighting Aids (Through change 2, 1975).	152.11
150/5340–17A Standby Power for Non-FAA Airport Lighting System (1971).	152.11
150/5340–18 Taxiway Guidance Sign System (1968)	152.11
150/5340–19 Taxiway Centerline Lighting System (1968)	152.11
150/5340–20 Installation Details and Maintenance Standards for Reflective Markers for Airport Runway and Taxiway Centerlines (1969).	152.11
150/5340–21 Airport Miscellaneous Lighting Visual Aids (1971)	152.11
150/5340–22 Maintenance Guide for Determining Degradation and Cleaning of Centerline and Touchdown Zone Lights (1971, change 1, 1976).	152.11
150/5340–23A Supplemental Wind Cones (1975)	152.11
150/5340–24 Runway and Taxiway Edge Lighting System (1975)	152.11
150/5340–25 Visual Approach Slope Indicator (VASI) Systems (Through change 1, 1977).	152.11
150/5345–1E Approved Airport Lighting Equipment (Through change 1, 1977).	152.11
150/5345–2 Specifications for L–810 Obstruction Light (through change 1, 1963).	152.11
150/5345–3C Specification for L–821 Panels for Remote Control of Airport Lighting (1977).	152.11
150/5345–4 Specification for L–829 Internally Lighted Airport Taxi Guidance Sign (Through change 1, 1967).	152.11
150/5345–5 Specification for L–847 Circuit Selector Switch, 5,000 Volt 20 Ampere (1963).	152.11
150/5345–7C Specification for L–824 Underground Electrical Cable for Airport Lighting Circuits (1976).	152.11
150/5345–10C Specification for L–828 Constant Current Regulators (1971).	152.11
150/5345–11 Specification for L–812 Static Indoor Type Constant Current Regulator Assembly; 4 KW and 7½ KW, With Brightness Control for Remote Operation (1964).	152.11
150/5345–12A Specification for L–801 Beacon (Through change 1, 1974).	152.11
150/5345–13 Specification for L–841 Auxiliary Relay Cabinet Assembly for Pilot Control of Airport Lighting Circuits (1964).	152.11

14 CFR CHAPTER I (PARTS 140-199)—Continued

FEDERAL AVIATION ADMINISTRATION, DEPARTMENT OF TRANSPORTATION—Continued

	14 CFR
150/5345-18 Specification for L-811 Static Indoor Type Constant Current Regulator Assembly, 4 KW, With Brightness Control and Runway Selection for Direct Operation (Through change 1, 1975).	152.11
150/5345-21 Specification for L-813 Static Indoor Type Constant Current Regulator Assembly, 4 KW and 7½ KW, for Remote Operation of Taxiway Lights (1964).	152.11
150/5345-26A Specification for L-823 Plug and Receptacle, Cable Connectors (Through change 1, 1971).	152.11
150/5345-27A Specification for L-807 Eight-foot and Twelve-foot Unlighted or Externally Lighted Wind Cone Assemblies (1969).	152.11
150/5345-28C Specification L-851 Visual Approach Slope Indicators and Accessories (1977).	152.11
150/5345-36 Specification for L-808 Lighted Wind Tee (1965)	152.11
150/5345-39A FAA Specification for L-853, Runway and Taxiway Retroreflective Markers (1971).	152.11
150/5345-42A FAA Specification L-857, Airport Light Bases, Transformer Housings, and Junction Boxes (Through change 1, 1975).	152.11
150/5345-43B FAA/DOD Specification L-856, High Intensity Obstruction Lighting Systems (1973).	152.11
150/5345-44A Specification for L-858 Retroreflective Taxiway Guidance Sign (1971).	152.11
150/5345-45 Lightweight Approach Light Structure (1973)	152.11
150/5345-46 Specification for Semiflush Airport Lights (Through change 1, 1975).	152.11
150/5345-47 Isolation Transformers for Airport Lighting Systems (1975)	152.11
150/5345-48 Specification for Runway and Taxiway Edge Lights (Thorugh change 1, 1976).	152.11
150/5360-6 Airport Terminal Building Development with Federal Participation (1976).	152.11
150/5360-7 Planning and Design Considerations for Airport Terminal Building Development (1976).	152.11
150/5370-7 Airport Construction Controls to Prevent Air Water Pollution (1971).	152.11
150/5370-9 Slip-Form Paving—Portland Cement Concrete (1973)	152.11
150/5370-10 Standards for Specifying Construction of Airports (1974)	152.11
150/5370-11 Use of Nondestructive Testing Devices in the Evaluation of Airport Pavements (1976).	152.11
150/5390-1A Heliport Design Guide (1969)	152.11
36-3B Estimated Airplane Noise Levels in A-Weighted Decibels (1981)	159.40

Address Table for Federal Aviation Administration Advisory Circulars:

FAA Distribution Unit, M-443.1, Department of Transportation Warehouse, 1725 15th St. NE., Washington, D.C. 20002

Airports Division, ANE-600, Federal Aviation Administration, 12 New England Executive Park, Burlington, MA 01803

Airports Division, AEA-600, Federal Aviation Administration, Federal Bldg., Room 329, John F. Kennedy International Airport, Jamaica, NY 11430

Airports District Office, ADO-NYC, Federal Aviation Administration, Colonial Bldg., 181 S. Franklin Ave., Valley Stream, NY 11581

14 CFR CHAPTER I (PARTS 140-199)—Continued

Airports District Office, ADO-HAR, Federal Aviation Administration, Terminal Bldg., Capital City Airport, New Cumberland, PA 17070

Airports District Office, ADO-WASH, Federal Aviation Administration, 900 S. Washington St., Falls Church, VA 22046

Airports Field Office, Federal Aviation Administration, Route 9—Box 31-C, Beaver, WV 25813

Airports Division, ASO-600, Federal Aviation Administration, 3400 Whipple St., East Point, GA 30344

Airports District Office, ADO-ATL, Federal Aviation Administration, Suite C, Room 116, 1568 Willingham Dr., College Park, GA 30337

Airports District Office, ADO-MIA, Federal Aviation Administration, FAA/NWS Bldg., Miami International Airport, Miami, FL 33159

Airports District Office, ADO-MEM, Federal Aviation Administration, 3973 Knight Arnold Rd., Suite 103, Memphis, TN 38118

Airports District Office, ADO-JAN, Federal Aviation Administration, FAA Bldg.—Municipal Airport, Jackson, MS 39208

Airports Division, AGL-600, Federal Aviation Administration, 2300 E. Devon Ave., Des Plaines, IL 60018

Airports District Office, CHI-ADO, Federal Aviation Administration, 2300 E. Devon Ave., Des Plaines, IL 60018

Airports District Office, DET-ADO, Federal Aviation Administration, Bdlg. 358, Detroit Metropolitan Airport, Detroit, MI 48242

Airports District Office, MSP-ADO, Federal Aviation Administration, 6301 34th Ave. South, Minneapolis, MN 55450

Airports Division, ACE-600, Federal Aviation Administration, Federal Bldg., 601 E. 12th St., Kansas City, MO 64106

Airports Division, ASW-600, Federal Aviation Administration, 4400 Blue Mound Rd., Fort Worth, TX 76131

Airports District Office, ASW-HOU-ADO, Federal Aviation Administration, Wm. P. Hobby Airport, 8800 Paul B. Koonce Dr., Houston, TX 77061

Airports District Office, ASW-ABQ-ADO, Federal Aviation Administration, NWS/FAA Bldg., Albuquerque International Airport, P.O. Box 9253, Albuquerque, NM 87119

Airports District Office, ASW-OKC-ADO, Federal Aviation Administration, FAA Bldg., Room 204, Wiley Post Airport, Bethany, OK 73008

Airports Division, ARM-600, Federal Aviation Administration, 10455 E. 25th Ave., Aurora, CO 80010

Airports Field Office, BIS-662, Federal Aviation Administration, 2000 Airport Rd., Bismarck, ND 58501

Airports Field Office, HLN-662, Federal Aviation Administration, FAA Bldg., Room 2, Helena County Airport, Helena, MT 59601

Airports Division, ANW-600, Federal Aviation Administration, FAA Bldg., Boeing Field, King County International Airport, Seattle, WA 98108

Airports Division, AWE-600, Federal Aviation Administration, 15000 Aviation Blvd., Lawndale, CA 90261

Airports Field Office, AWE-680, Federal Aviation Administration, 15000 Aviation Blvd., Lawndale, CA 90261

Airports Field Office, SFO-680, Federal Aviation Administration, 831 Mitten Rd., Burlingame, CA 94010

Airports Division, AAL-600, Federal Aviation Administration, Anchorage Federal Office Bldg., P.O. Box 14, 701 C. St., Anchorage, AL 99513

Airports Division, APC-600, Federal Aviation Administration, Prince Jonah Kuhio Kalanianaole Bldg., 300 Ala Moana Blvd., Honolulu, HI 96813

Technical Standard Orders:

United States Flight Inspection Manual (3d Ed., May, 1963) 171.71

United States Standard for Technical Instrument Procedures (3d Ed., July, 1976). 171.71

14 CFR CHAPTER I (PARTS 140-199)—Continued

FEDERAL AVIATION ADMINISTRATION, DEPARTMENT OF TRANSPORTATION—Continued

	14 CFR
International Civil Aviation Organization Attention: Distribution Officer, P.O. Box 400, Succursale: Place de l'Aviation Internationale, 1000 Sherbrooke St. West, Montreal, Quebec, Canada, H3A 2R2	
Annex 10 to the Convention on International Civil Aviation (2d Ed., Vol. I, Apr. 1965).	171.71

BLANK PAGE

Table of CFR Titles and Chapters

(As of December 13, 1985)

Title 1—General Provisions

Chap.	
I	Administrative Committee of the Federal Register (Parts 1-49)
II	Office of the Federal Register (Parts 50-299)
III	Administrative Conference of the United States (Parts 300-399)
IV	Miscellaneous Agencies (Parts 400-499)

Title 2—[Reserved]

Title 3—The President

	Proclamations
	Executive Orders
	Other Presidential Documents
I	Executive Office of the President (Parts 100-199)

Title 4—Accounts

I	General Accounting Office (Parts 1-99)
II	Federal Claims Collection Standards (General Accounting Office—Department of Justice) (Parts 100-299)
III	General Accounting Office (CASB) (Parts 300-499)

Title 5—Administrative Personnel

I	Office of Personnel Management (Parts 1-1199)
II	Merit Systems Protection Board (Parts 1200-1299)
III	Office of Management and Budget (Parts 1300-1399)
IV	Advisory Committee on Federal Pay (Parts 1400-1499)
V	The International Organizations Employees Loyalty Board (Parts 1500-1599)
VII	Advisory Commission on Intergovernmental Relations (Parts 1700-1799)
IX	Appalachian Regional Commission (Parts 1900-1999)
XI	United States Soldiers' and Airmen's Home (Parts 2100-2199)
XIV	Federal Labor Relations Authority, General Counsel of the Federal Labor Relations Authority and Federal Service Impasses Panel (Parts 2400-2499)

Title 5—Administrative Personnel—Continued

Chap.	
XV	Office of Administration, Executive Office of the President (Parts 2500-2599)

Title 6—[Reserved]

Title 7—Agriculture

	SUBTITLE A—Office of the Secretary of Agriculture (Parts 0-25a)
	SUBTITLE B—Regulations of the Department of Agriculture
I	Agricultural Marketing Service (Standards, Inspections, Marketing Practices), Department of Agriculture (Parts 26-209)
II	Food and Nutrition Service, Department of Agriculture (Parts 210-299)
III	Animal and Plant Health Inspection Service, Department of Agriculture (Parts 300-399)
IV	Federal Crop Insurance Corporation, Department of Agriculture (Parts 400-499)
V	Agricultural Research Service, Department of Agriculture (Parts 500-599)
VI	Soil Conservation Service, Department of Agriculture (Parts 600-699)
VII	Agricultural Stabilization and Conservation Service (Agricultural Adjustment), Department of Agriculture (Parts 700-799)
VIII	Federal Grain Inspection Service, Department of Agriculture (Parts 800-899)
IX	Agricultural Marketing Service (Marketing Agreements and Orders; Fruits, Vegetables, Nuts), Department of Agriculture (Parts 900-999)
X	Agricultural Marketing Service (Marketing Agreements and Orders; Milk), Department of Agriculture (Parts 1000-1199)
XI	Agricultural Marketing Service (Marketing Agreements and Orders; Miscellaneous Commodities), Department of Agriculture (Parts 1200-1299)
XIV	Commodity Credit Corporation, Department of Agriculture (Parts 1400-1499)
XV	Foreign Agricultural Service, Department of Agriculture (Parts 1500-1599)
XVI	Rural Telephone Bank, Department of Agriculture (Parts 1600-1699)
XVII	Rural Electrification Administration, Department of Agriculture (Parts 1700-1799)
XVIII	Farmers Home Administration, Department of Agriculture (Parts 1800-2099)
XXI	Foreign Economic Development Service, Department of Agriculture (Parts 2100-2199)
XXII	Office of International Cooperation and Development, Department of Agriculture (Parts 2200-2299)
XXIV	Board of Contract Appeals, Department of Agriculture (Parts 2400-2499)

Title 7—Agriculture—Continued

Chap.	
XXV	Office of the General Sales Manager, Department of Agriculture (Parts 2500-2599)
XXVI	Office of Inspector General, Department of Agriculture (Parts 2600-2699)
XXVII	Office of Information Resources Management, Department of Agriculture (Parts 2700-2799)
XXIX	Office of Energy, Department of Agriculture (Parts 2900-2999)
XXX	Office of Operations and Finance, Department of Agriculture (Parts 3000-3099)
XXXI	Office of Environmental Quality, Department of Agriculture (Parts 3100-3199)
XXXII	Office of Grants and Program Systems, Department of Agriculture (Parts 3200-3299)
XXXIV	Cooperative State Research Service, Department of Agriculture (Parts 3400-3499)

Title 8—Aliens and Nationality

I	Immigration and Naturalization Service, Department of Justice (Parts 1-499)

Title 9—Animals and Animal Products

I	Animal and Plant Health Inspection Service, Department of Agriculture (Parts 1-199)
II	Packers and Stockyards Administration, Department of Agriculture (Parts 200-299)
III	Food Safety and Inspection Service, Meat and Poultry Inspection, Department of Agriculture (Parts 300-399)

Title 10—Energy

I	Nuclear Regulatory Commission (Parts 0-199)
II	Department of Energy (Parts 200-699)
III	Department of Energy (Parts 700-999)
X	Department of Energy (General Provisions) (Parts 1000-1099)
XV	Office of the Federal Inspector for the Alaska Natural Gas Transportation System (Parts 1500-1599)

Title 11—Federal Elections

I	Federal Election Commission (Parts 1-9099)

Title 12—Banks and Banking

I	Comptroller of the Currency, Department of the Treasury (Parts 1-199)
II	Federal Reserve System (Parts 200-299)
III	Federal Deposit Insurance Corporation (Parts 300-399)
IV	Export-Import Bank of the United States (Parts 400-499)

Title 12—Banks and Banking—Continued

Chap.	
V	Federal Home Loan Bank Board (Parts 500-599)
VI	Farm Credit Administration (Parts 600-699)
VII	National Credit Union Administration (Parts 700-799)
VIII	Federal Financing Bank (Parts 800-899)
XI	Federal Financial Institutions Examination Council (Parts 1100-1199)
XII	Depository Institutions Deregulation Committee (Parts 1200-1299)

Title 13—Business Credit and Assistance

I	Small Business Administration (Parts 1-199)
III	Economic Development Administration, Department of Commerce (Parts 300-399)
V	Regional Action Planning Commissions (Parts 500-599)

Title 14—Aeronautics and Space

I	Federal Aviation Administration, Department of Transportation (Parts 1-199)
II	Office of the Secretary, Department of Transportation (Aviation Proceedings) (Parts 200-399)
V	National Aeronautics and Space Administration (Parts 1200-1299)

Title 15—Commerce and Foreign Trade

	SUBTITLE A—Office of the Secretary of Commerce (Parts 0-29)
	SUBTITLE B—Regulations Relating to Commerce and Foreign Trade
I	Bureau of the Census, Department of Commerce (Parts 30-199)
II	National Bureau of Standards, Department of Commerce (Parts 200-299)
III	International Trade Administration, Department of Commerce (Parts 300-399)
IV	Foreign-Trade Zones Board (Parts 400-499)
VI	Bureau of Industrial Economics, Department of Commerce (Parts 600-699)
VIII	Bureau of Economic Analysis, Department of Commerce (Parts 800-899)
IX	National Oceanic and Atmospheric Administration, Department of Commerce (Parts 900-999)
XII	United States Travel Service, Department of Commerce (Parts 1200-1299)
XIII	East-West Foreign Trade Board (Parts 1300-1399)
XIV	Minority Business Development Agency (Parts 1400-1499)
	SUBTITLE C—Regulations Relating to Foreign Trade Agreements
XX	Office of the United States Trade Representative (Parts 2000-2099)

Title 15—Commerce and Foreign Trade—Continued

Chap.	
	SUBTITLE D—Regulations Relating to Telecommunications and Information
XXIII	National Telecommunications and Information Administration, Department of Commerce (Parts 2300-2399)

Title 16—Commercial Practices

I	Federal Trade Commission (Parts 0-999)
II	Consumer Product Safety Commission (Parts 1000-1799)

Title 17—Commodity and Securities Exchanges

I	Commodity Futures Trading Commission (Parts 1-199)
II	Securities and Exchange Commission (Parts 200-399)

Title 18—Conservation of Power and Water Resources

I	Federal Energy Regulatory Commission, Department of Energy (Parts 1-399)
III	Delaware River Basin Commission (Parts 400-499)
VI	Water Resources Council (Parts 700-799)
VIII	Susquehanna River Basin Commission (Parts 800-899)
XIII	Tennessee Valley Authority (Parts 1300-1399)

Title 19—Customs Duties

I	United States Customs Service, Department of the Treasury (Parts 1-199)
II	United States International Trade Commission (Parts 200-299)
III	International Trade Administration, Department of Commerce (Parts 300-399)

Title 20—Employees' Benefits

I	Office of Workers' Compensation Programs, Department of Labor (Parts 1-199)
II	Railroad Retirement Board (Parts 200-399)
III	Social Security Administration, Department of Health and Human Services (Parts 400-499)
IV	Employees' Compensation Appeals Board, Department of Labor (Parts 500-599)
V	Employment and Training Administration, Department of Labor (Parts 600-699)
VI	Employment Standards Administration, Department of Labor (Parts 700-799)
VII	Benefits Review Board, Department of Labor (Parts 800-899)
VIII	Joint Board for the Enrollment of Actuaries (Parts 900-999)

Title 21—Food and Drugs

Chap.	
I	Food and Drug Administration, Department of Health and Human Services (Parts 1-1299)
II	Drug Enforcement Administration, Department of Justice (Parts 1300-1399)

Title 22—Foreign Relations

I	Department of State (Parts 1-199)
II	Agency for International Development, International Development Cooperation Agency (Parts 200-299)
III	Peace Corps (Parts 300-399)
IV	International Joint Commission, United States and Canada (Parts 400-499)
V	United States Information Agency (Parts 500-599)
VI	United States Arms Control and Disarmament Agency (Parts 600-699)
VII	Overseas Private Investment Corporation (Parts 700-799)
IX	Foreign Service Grievance Board Regulations (Parts 900-999)
X	Inter-American Foundation (Parts 1000-1099)
XI	International Boundary and Water Commission, United States and Mexico, United States Section (Parts 1100-1199)
XII	United States International Development Cooperation Agency (Parts 1200-1299)
XIII	Board for International Broadcasting (Parts 1300-1399)
XIV	Foreign Service Labor Relations Board; Federal Labor Relations Authority; General Counsel of the Federal Labor Relations Authority; and the Foreign Service Impasse Disputes Panel (Parts 1400-1499)
XV	African Development Foundation (Parts 1500-1599)

Title 23—Highways

I	Federal Highway Administration, Department of Transportation (Parts 1-999)
II	National Highway Traffic Safety Administration and Federal Highway Administration, Department of Transportation (Parts 1200-1299)
III	National Highway Traffic Safety Administration, Department of Transportation (Parts 1300-1399)

Title 24—Housing and Urban Development

	SUBTITLE A—Office of the Secretary, Department of Housing and Urban Development (Parts 0-99)
	SUBTITLE B—Regulations Relating to Housing and Urban Development
I	Office of Assistant Secretary for Equal Opportunity, Department of Housing and Urban Development (Parts 100-199)
II	Office of Assistant Secretary for Housing—Federal Housing Commissioner, Department of Housing and Urban Development (Parts 200-299)

Title 24—Housing and Urban Development—Continued

Chap.	
III	Government National Mortgage Association, Department of Housing and Urban Development (Parts 300-399)
V	Office of Assistant Secretary for Community Planning and Development, Department of Housing and Urban Development (Parts 500-599)
VI	Office of Assistant Secretary for Community Planning and Development, Department of Housing and Urban Development (Parts 600-699)
VII	Office of the Secretary, Department of Housing and Urban Development (Section 8 Housing Assistance Programs and Public and Indian Housing Programs) (Parts 700-799)
VIII	Office of the Assistant Secretary for Housing—Federal Housing Commissioner, Department of Housing and Urban Development (Section 8 Housing Assistance Programs and Section 202 Direct Loan Program) (Parts 800-899)
IX	Office of Assistant Secretary for Public and Indian Housing, Department of Housing and Urban Development (Parts 900-999)
X	Office of Assistant Secretary for Housing—Federal Housing Commissioner, Department of Housing and Urban Development (Interstate Land Sales Registration Program) (Parts 1700-1799)
XI	Solar Energy and Energy Conservation Bank, Department of Housing and Urban Development (Parts 1800-1899)
XII	Office of Inspector General, Department of Housing and Urban Development (Parts 2000-2099)
XV	Mortgage Insurance and Loan Programs Under the Emergency Homeowners' Relief Act, Department of Housing and Urban Development (Parts 2700-2799)
XX	Office of Assistant Secretary for Housing—Federal Housing Commissioner, Department of Housing and Urban Development (Parts 3200-3699)
XXV	Neighborhood Reinvestment Corporation (Parts 4100-4199)

Title 25—Indians

I	Bureau of Indian Affairs, Department of the Interior (Parts 1-299)
II	Indian Arts and Crafts Board, Department of the Interior (Parts 300-399)
IV	Navajo and Hopi Indian Relocation Commission (Parts 700-799)

Title 26—Internal Revenue

I	Internal Revenue Service, Department of the Treasury (Parts 1-699)

Title 27—Alcohol, Tobacco Products and Firearms

I	Bureau of Alcohol, Tobacco and Firearms, Department of the Treasury (Parts 1-299)

Title 28—Judicial Administration

Chap	
I	Department of Justice (Parts 0-199)
III	Federal Prison Industries Inc., Department of Justice (Parts 300-399)
V	Bureau of Prisons, Department of Justice (Parts 500-599)

Title 29—Labor

	SUBTITLE A—Office of the Secretary of Labor (Parts 0-99)
	SUBTITLE B—Regulations Relating to Labor
I	National Labor Relations Board (Parts 100-199)
II	Bureau of Labor-Management Relations and Cooperative Programs, Department of Labor (Parts 200-299)
III	National Railroad Adjustment Board (Parts 300-399)
IV	Office of Labor-Management Standards, Department of Labor (Parts 400-499)
V	Wage and Hour Division, Department of Labor (Parts 500-899)
IX	Construction Industry Collective Bargaining Commission (Parts 900-999)
X	National Mediation Board (Parts 1200-1299)
XII	Federal Mediation and Conciliation Service (Parts 1400-1499)
XIV	Equal Employment Opportunity Commission (Parts 1600-1699)
XVII	Occupational Safety and Health Administration, Department of Labor (Parts 1900-1999)
XX	Occupational Safety and Health Review Commission (Parts 2200-2499)
XXV	Office of Pension and Welfare Benefit Programs, Department of Labor (Parts 2500-2599)
XXVI	Pension Benefit Guaranty Corporation (Parts 2600-2699)
XXVII	Federal Mine Safety and Health Review Commission (Parts 2700-2799)

Title 30—Mineral Resources

I	Mine Safety and Health Administration, Department of Labor (Parts 1-199)
II	Minerals Management Service, Department of the Interior (Parts 200-299)
III	Board of Surface Mining and Reclamation Appeals, Department of the Interior (Parts 300-399)
IV	Geological Survey, Department of the Interior (Parts 400-499)
VI	Bureau of Mines, Department of the Interior (Parts 600-699)
VII	Office of Surface Mining Reclamation and Enforcement, Department of the Interior (Parts 700-999)

Title 31—Money and Finance: Treasury

	SUBTITLE A—Office of the Secretary of the Treasury (Parts 0-50)
	SUBTITLE B—Regulations Relating to Money and Finance

Title 31—Money and Finance: Treasury—Continued

Chap.	
I	Monetary Offices, Department of the Treasury (Parts 51-199)
II	Fiscal Service, Department of the Treasury (Parts 200-399)
IV	Secret Service, Department of the Treasury (Parts 400-499)
V	Office of Foreign Assets Control, Department of the Treasury (Parts 500-599)
VI	Bureau of Engraving and Printing, Department of the Treasury (Parts 600-699)
VII	Federal Law Enforcement Training Center, Department of the Treasury (Parts 700-799)

Title 32—National Defense

	SUBTITLE A—Department of Defense
I	Office of the Secretary of Defense (Parts 1-399)
V	Department of the Army (Parts 400-699)
VI	Department of the Navy (Parts 700-799)
VII	Department of the Air Force (Parts 800-1099)
	SUBTITLE B—Other Regulations Relating to National Defense
XII	Defense Logistics Agency (Parts 1200-1299)
XVI	Selective Service System (Parts 1600-1699)
XIX	Central Intelligence Agency (Parts 1900-1999)
XX	Information Security Oversight Office (Parts 2000-2099)
XXI	National Security Council (Parts 2100-2199)
XXIV	Office of Science and Technology Policy (Parts 2400-2499)
XXVII	Office for Micronesian Status Negotiations (Parts 2700-2799)
XXVIII	Office of the Vice President of the United States (Parts 2800-2899)

Title 33—Navigation and Navigable Waters

I	Coast Guard, Department of Transportation (Parts 1-199)
II	Corps of Engineers, Department of the Army (Parts 200-399)
IV	Saint Lawrence Seaway Development Corporation, Department of Transportation (Parts 400-499)

Title 34—Education

	SUBTITLE A—Office of the Secretary, Department of Education (Parts 1-99)
	SUBTITLE B—Regulations of the Offices of the Department of Education
I	Office for Civil Rights, Department of Education (Parts 100-199)
II	Office of Elementary and Secondary Education, Department of Education (Parts 200-299)
III	Office of Special Education and Rehabilitative Services, Department of Education (Parts 300-399)
IV	Office of Vocational and Adult Education, Department of Education (Parts 400-499)

Title 34—Education—Continued

Chap.	
V	Office of Bilingual Education and Minority Languages Affairs Department of Education (Parts 500-599)
VI	Office of Postsecondary Education, Department of Education (Parts 600-699)
VII	Office of Educational Research and Improvement, Department of Education (Parts 700-799)

Title 35—Panama Canal

I	Panama Canal Regulations (Parts 1-299)

Title 36—Parks, Forests, and Public Property

I	National Park Service, Department of the Interior (Parts 1-199)
II	Forest Service, Department of Agriculture (Parts 200-299)
III	Corps of Engineers, Department of the Army (Parts 300-399)
IV	American Battle Monuments Commission (Parts 400-499)
V	Smithsonian Institution (Parts 500-599)
VII	Library of Congress (Parts 700-799)
VIII	Advisory Council on Historic Preservation (Parts 800-899)
IX	Pennsylvania Avenue Development Corporation (Parts 900-999)
X	Commission of Fine Arts (Parts 1000-1099)
XI	Architectural and Transportation Barriers Compliance Board (Parts 1100-1199)
XII	National Archives and Records Administration (Parts 1200-1299)

Title 37—Patents, Trademarks, and Copyrights

I	Patent and Trademark Office, Department of Commerce (Parts 1-199)
II	Copyright Office, Library of Congress (Parts 200-299)
III	Copyright Royalty Tribunal (Parts 300-399)
IV	Assistant Secretary for Productivity, Technology and Innovation, U.S. Department of Commerce (Parts 400-499)

Title 38—Pensions, Bonuses, and Veterans' Relief

I	Veterans Administration (Parts 0-99)

Title 39—Postal Service

I	United States Postal Service (Parts 1-999)
III	Postal Rate Commission (Parts 3000-3099)

Title 40—Protection of Environment

I	Environmental Protection Agency (Parts 1-799)
V	Council on Environmental Quality (Parts 1500-1599)

Title 41—Public Contracts and Property Management

Chap.	
	SUBTITLE B—Other Provisions Relating to Public Contracts
50	Public Contracts, Department of Labor (Parts 50-1—50-999)
51	Committee for Purchase from the Blind and Other Severely Handicapped (Parts 51-1—51-99)
60	Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Parts 60-1—60-999)
	SUBTITLE C—Federal Property Management Regulations System
101	Federal Property Management Regulations (Parts 101-1—101-99)
105	General Services Administration (Parts 105-1—105-999)
109	Department of Energy Property Management Regulations (Parts 109-1—109-99)
114	Department of the Interior (Parts 114-1—114-99)
115	Environmental Protection Agency (Parts 115-1—115-99)
128	Department of Justice (Parts 128-1—128-99)
	SUBTITLE D—Other Provisions Relating to Property Management [Reserved]
	SUBTITLE E—Federal Information Resources Management Regulations System
201	Federal Information Resources Management Regulations (Parts 201-1—201-99)

Title 42—Public Health

I	Public Health Service, Department of Health and Human Services (Parts 1-199)
III	Saint Elizabeths Hospital, Department of Health and Human Services (Parts 300-399)
IV	Health Care Financing Administration, Department of Health and Human Services (Parts 400-499)

Title 43—Public Lands: Interior

	SUBTITLE A—Office of the Secretary of the Interior (Parts 1-199)
	SUBTITLE B—Regulations Relating to Public Lands
I	Bureau of Reclamation, Department of the Interior (Parts 200-499)
II	Bureau of Land Management, Department of the Interior (Parts 1000-9999)

Title 44—Emergency Management and Assistance

I	Federal Emergency Management Agency (Parts 0-399)
IV	Department of Commerce and Department of Transportation (Parts 400-499)

Title 45—Public Welfare

Chap.	
	SUBTITLE A—Department of Health and Human Services, General Administration (Parts 1-199)
	SUBTITLE B—Regulations Relating to Public Welfare
II	Office of Family Assistance (Assistance Programs), Department of Health and Human Services (Parts 200-299)
III	Office of Child Support Enforcement (Child Support Enforcement Program), Department of Health and Human Services (Parts 300-399)
IV	Office of Refugee Resettlement, Social Security Administration, Department of Health and Human Services (Parts 400-499)
V	Foreign Claims Settlement Commission of the United States, Department of Justice (Parts 500-599)
VI	National Science Foundation (Parts 600-699)
VII	Commission on Civil Rights (Parts 700-799)
VIII	Office of Personnel Management (Parts 800-899)
X	Office of Community Services, Department of Health and Human Services (Parts 1000-1099)
XI	National Foundation on the Arts and the Humanities (Parts 1100-1199)
XII	ACTION (Parts 1200-1299)
XIII	Office of Human Development Services, Department of Health and Human Services (Parts 1300-1399)
XVI	Legal Services Corporation (Parts 1600-1699)
XVII	National Commission on Libraries and Information Science (Parts 1700-1799)
XVIII	Harry S Truman Scholarship Foundation (Parts 1800-1899)
XXI	Commission of Fine Arts (Parts 2100-2199)

Title 46—Shipping

I	Coast Guard, Department of Transportation (Parts 1-199)
II	Maritime Administration, Department of Transportation (Parts 200-399)
III	Coast Guard (Great Lakes Pilotage), Department of Transportation (Parts 400-499)
IV	Federal Maritime Commission (Parts 500-599)

Title 47—Telecommunication

I	Federal Communications Commission (Parts 0-199)
II	Office of Science and Technology Policy and National Security Council (Parts 200-299)

Title 48—Federal Acquisition Regulations System

1	Federal Acquisition Regulation (Parts 1-99)
2	Department of Defense (Parts 200-299)
3	Department of Health and Human Services (Parts 300-399)

Title 48—Federal Acquisition Regulations System—Continued

Chap.

4 Department of Agriculture (Parts 400-499)

5 General Services Administration (Parts 500-599)

7 Agency for International Development (Parts 700-799)

8 Veterans Administration (Parts 800-899)

9 Department of Energy (Parts 900-999)

10 Department of the Treasury Acquisition/Procurement Regulation (Parts 1000-1099)

12 Department of Transportation (Parts 1200-1299)

13 Department of Commerce (Parts 1300-1399)

14 Department of the Interior (Parts 1400-1499)

15 Environmental Protection Agency (Parts 1500-1599)

18 National Aeronautics and Space Administration (Parts 1800-1899)

19 United States Information Agency (Parts 1900-1999)

22 Small Business Administration (Parts 2200-2299)

24 Department of Housing and Urban Development (Parts 2400-2499)

25 National Science Foundation (Parts 2500-2599)

28 Department of Justice (Parts 2800-2899)

29 Department of Labor (Parts 2900-2999)

44 Federal Emergency Management Agency (Parts 4400-4499)

61 General Services Administration Board of Contract Appeals (Parts 6100-6199)

Title 49—Transportation

SUBTITLE A—Office of the Secretary of Transportation (Parts 1-99)

SUBTITLE B—Other Regulations Relating to Transportation

I Research and Special Programs Administration, Department of Transportation (Parts 100-199)

II Federal Railroad Administration, Department of Transportation (Parts 200-299)

III Federal Highway Administration, Department of Transportation (Parts 300-399)

IV Coast Guard, Department of Transportation (Parts 400-499)

V National Highway Traffic Safety Administration, Department of Transportation (Parts 500-599)

VI Urban Mass Transportation Administration, Department of Transportation (Parts 600-699)

VII National Railroad Passenger Corporation (AMTRAK) (Parts 700-799)

VIII National Transportation Safety Board (Parts 800-899)

IX United States Railway Association (Parts 900-999)

X Interstate Commerce Commission (Parts 1000-1399)

Title 50—Wildlife and Fisheries

Chap.	
I	United States Fish and Wildlife Service, Department of the Interior (Parts 1-199)
II	National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce (Parts 200-299)
III	International Regulatory Agencies (Fishing and Whaling) (Parts 300-399)
IV	Joint Regulations (United States Fish and Wildlife Service, Department of the Interior and National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce); Endangered Species Committee Regulations (Parts 400-499)
V	Marine Mammal Commission (Parts 500-599)
VI	Fishery Conservation and Management, National Oceanic and Atmospheric Administration, Department of Commerce (Parts 600-699)

CFR Index and Finding Aids

Subject/Agency Index

List of Agency Prepared Indexes

Parallel Tables of Statutory Authorities and Rules

Acts Requiring Publication in the Federal Register

List of CFR Titles, Chapters, Subchapters, and Parts

Alphabetical List of Agencies Appearing in the CFR

(As of December 13, 1985)

Agency	CFR Title, Subtitle or Chapter
ACTION	45, XII
Administrative Committee of the Federal Register	1, I
Administrative Conference of the United States	1, III
Advisory Commission on Intergovernmental Relations	5, VII
Advisory Committee on Federal Pay	5, IV
Advisory Council on Historic Preservation	36, VIII
African Development Foundation	22, XV
Agency for International Development	22, II; 48, 7
Agricultural Marketing Service	7, I, IX, X, XI
Agricultural Research Service	7, V
Agricultural Stabilization and Conservation Service	7, VII
Agriculture Department	
Agricultural Marketing Service	7, I, IX, X, XI
Agricultural Research Service	7, V
Agricultural Stabilization and Conservation Service	7, VII
Animal and Plant Health Inspection Service	7, III; 9, I, III
Commodity Credit Corporation	7, XIV
Contract Appeals, Board of	7, XXIV
Cooperative State Research Service	7, XXXIV
Energy, Office of	7, XXIX
Environmental Quality, Office of	7, XXXI
Farmers Home Administration	7, XVIII
Federal Acquisition Regulation	48, 4
Federal Crop Insurance Corporation	7, IV
Federal Grain Inspection Service	7, VIII
Food and Nutrition Service	7, II
Food Safety and Inspection Service	9, III
Foreign Agricultural Service	7, XV
Foreign Economic Development Service	7, XXI
Forest Service	36, II
General Sales Manager, Office of	7, XXV
Grants and Program Systems, Office of	7, XXXII
Information Resources Management, Office of	7, XXVII
Inspector General, Office of	7, XXVI
International Cooperation and Development Office	7, XXII
Operations and Finance, Office of	7, XXX
Packers and Stockyards Administration	9, II
Rural Electrification Administration	7, XVII
Rural Telephone Bank	7, XVI
Secretary of Agriculture, Office of	7, Subtitle A
Soil Conservation Service	7, VI
Air Force Department	32, VII
Alaska Natural Gas Transportation System, Office of the Federal Inspector	10, XV
Alcohol, Tobacco and Firearms, Bureau of	27, I
AMTRAK	49, VII
American Battle Monuments Commission	36, IV
Animal and Plant Health Inspection Service	7, III; 9, I
Appalachian Regional Commission	5, IX
Architectural and Transportation Barriers Compliance Board	36, XI

Agency	CFR Title, Subtitle or Chapter
Arms Control and Disarmament Agency, U.S.	22, VI
Army Department	32, V
Engineers, Corps of	33, II; 36, III
Benefits Review Board	20, VII
Bilingual Education and Minority Languages Affairs, Office of	34, V
Blind and Other Severely Handicapped, Committee for Purchase from	41, 51
Board for International Broadcasting	22, XIII
Budget, Office of Management and	5, III
Census Bureau	15, I
Central Intelligence Agency	32, XIX
Child Support Enforcement, Office of	45, III
Civil Rights Commission	45, VII
Civil Rights, Office for (Education Department)	34, I
Claims Collection Standards, Federal	4, II
Coast Guard	33, I; 46, I, III; 49, IV
Commerce Department	44, IV
Census Bureau	15, I
Economic Analysis, Bureau of	15, VIII
Economic Development Administration	13, III
Endangered Species Committee	50, IV
Federal Acquisition Regulation	48, 13
Fishery Conservation and Management	50, VI
Industrial Economics, Bureau of	15, VI
International Trade Administration	15, III; 19, III
National Bureau of Standards	15, II
National Marine Fisheries Service	50, II, IV
National Oceanic and Atmospheric Administration	15, IX; 50, II, III, IV, VI
National Telecommunications and Information Administration	15, XXIII
Patent and Trademark Office	37, I
Productivity, Technology and Innovation, Assistant Secretary	37, IV
Secretary of Commerce, Office of	15, Subtitle A
United States Travel Service	15, XII
Committee for Purchase from Blind and Other Severely Handicapped	41, 51
Commodity Credit Corporation	7, XIV
Commodity Futures Trading Commission	17, I
Community Planning and Development, Office of Assistant Secretary for	24, V, VI
Community Services, Office of	45, X
Comptroller of the Currency	12, I
Construction Industry Collective Bargaining Commission	29, IX
Consumer Product Safety Commission	16, II
Contract Appeals, Board of	7, XXIV
Cooperative State Research Service	7, XXXIV
Copyright Office	37, II
Copyright Royalty Tribunal	37, III
Council on Environmental Quality	40, V
Customs Service United States	19, I
Defense Department	32, Subtitle A
Air Force Department	32, VII
Army Department	32, V; 33, II; 36, III
Engineers, Corps of	33, II; 36, III
Federal Acquisition Regulation	48, 2
Navy Department	32, VI
Secretary of Defense, Office of	32, I
Defense Logistics Agency	32, XII
Delaware River Basin Commission	18, III
Depository Institutions Deregulation Committee	12, XII
Drug Enforcement Administration	21, II
East-West Foreign Trade Board	15, XIII
Economic Analysis, Bureau of	15, VIII

Agency	CFR Title, Subtitle or Chapter
Economic Development Administration	13, III
Education, Department of	
Bilingual Education and Minority Languages Affairs, Office of	34, V
Civil Rights, Office for	34, I
Educational Research and Improvement, Office of	34, VII
Elementary and Secondary Education, Office of	34, II
Postsecondary Education, Office of	34, VI
Secretary of Education, Office of	34, Subtitle A
Special Education and Rehabilitative Services, Office of	34, III
Vocational and Adult Education, Office of	34, IV
Educational Research and Improvement, Office of	34, VII
Elementary and Secondary Education, Office of	34, II
Employee Benefits Security, Office of	29, XXV
Employees' Compensation Appeals Board	20, IV
Employees Loyalty Board, International Organizations	5, V
Employment and Training Administration	20, V
Employment Standards Administration	20, VI
Endangered Species Committee	50, IV
Energy, Department of	10, II, III, X; 41, 109
Federal Acquisition Regulation	48, 9
Federal Energy Regulatory Commission	18, I
Energy, Office of, Department of Agriculture	7, XXIX
Engineers, Corps of	33, II; 36, III
Engraving and Printing, Bureau of	31, VI
Environmental Protection Agency	40, I; 41, 115; 48, 15
Environmental Quality, Office of (Agriculture Department)	7, XXXI
Equal Employment Opportunity Commission	29, XIV
Equal Opportunity, Office of Assistant Secretary for	24, I
Executive Office of the President	3, I
Administration, Office of	5, XV
Export-Import Bank of the United States	12, IV
Family Assistance, Office of	45, II
Farm Credit Administration	12, VI
Farmers Home Administration	7, XVIII
Federal Acquisition Regulation	48, 1
Federal Aviation Administration	14, I
Federal Claims Collection Standards	4, II
Federal Communications Commission	47, I
Federal Contract Compliance Programs, Office of	41, 60
Federal Crop Insurance Corporation	7, IV
Federal Deposit Insurance Corporation	12, III
Federal Election Commission	11, I
Federal Emergency Management Agency	44, I; 48, 44
Federal Energy Regulatory Commission	18, I
Federal Financial Institutions Examination Council	12, XI
Federal Financing Bank	12, VIII
Federal Grain Inspection Service	7, VIII
Federal Highway Administration	23, I, II; 49, III
Federal Home Loan Bank Board	12, V
Federal Home Loan Mortgage Corporation	1, IV
Federal Information Resources Management Regulations	41, Subtitle E, Ch. 201
Federal Inspector for the Alaska Natural Gas Transportation System, Office of	10, XV
Federal Labor Relations Authority, and General Counsel of the Federal Labor Relations Authority	5, XIV; 22, XIV
Federal Law Enforcement Training Center	31, VII
Federal Maritime Commission	46, IV
Federal Mediation and Conciliation Service	29, XII
Federal Mine Safety and Health Review Commission	29, XXVII
Federal Pay, Advisory Committee on	5, IV
Federal Prison Industries Inc.	28, III
Federal Property Management Regulations	41, 101
Federal Property Management Regulations System	41, Subtitle C
Federal Railroad Administration	49, II
Federal Register, Administrative Committee of	1, I

Agency	CFR Title, Subtitle or Chapter
Federal Register, Office of	1, II
Federal Reserve System	12, II
Federal Service Impasses Panel	5, XIV
Federal Trade Commission	16, I
Fine Arts Commission	36, X; 45, XXI
Fiscal Service	31, II
Fish and Wildlife Service, United States	50, I, IV
Fishery Conservation and Management	50, VI
Fishing and Whaling, International Regulatory Agencies	50, III
Food and Drug Administration	21, I
Food and Nutrition Service	7, II
Food Safety and Inspection Service	9, III
Foreign Agricultural Service	7, XV
Foreign Assets Control, Office of	31, V
Foreign Claims Settlement Commission of United States	45, V
Foreign Economic Development Service	7, XXI
Foreign Service Grievance Board	22, IX
Foreign Service Impasse Disputes Panel	22, XIV
Foreign Service Labor Relations Board	22, XIV
Foreign-Trade Zones Board	15, IV
Forest Service	36, II
General Accounting Office	4, I, II, III
General Sales Manager, Office of	7, XXV
General Services Administration	
Contract Appeals Board	48, 61
Federal Acquisition Regulation	48, 5
Federal Information Resources Management Regulations	41, Subtitle E, Ch. 201
Federal Property Management Regulations System	41, 101, 105
Geological Survey	30, IV
Government National Mortgage Association	24, III
Grants and Program Systems, Office of	7, XXXII
Great Lakes Pilotage	46, III
Harry S Truman Scholarship Foundation	45, XVIII
Health and Human Services, Department of	45, Subtitle A
Child Support Enforcement, Office of	45, III
Community Services, Office of	45, X
Family Assistance, Office of	45, II
Federal Acquisition Regulation	48, 3
Food and Drug Administration	21, I
Health Care Financing Administration	42, IV
Human Development Services Office	45, XIII
Public Health Service	42, I
Refugee Resettlement, Office of	45, IV
St. Elizabeths Hospital	42, III
Social Security Administration	20, III; 45, IV
Health Care Financing Administration	42, IV
Housing and Urban Development, Department of	
Community Planning and Development, Office of Assistant Secretary for	24, V, VI
Equal Opportunity, Office of Assistant Secretary for	24, I
Federal Acquisition Regulation	48, 24
Government National Mortgage Association	24, III
Housing—Federal Housing Commissioner, Office of Assistant Secretary for	24, II, VIII, X, XX
Inspector General, Office of	24, XII
Mortgage Insurance and Loan Programs Under Emergency Homeowners' Relief Act	24, XV
Public and Indian Housing, Office of Assistant Secretary for	24, IX
Secretary, Office of	24, Subtitle A, VII
Solar Energy and Energy Conservation Bank	24, XI
Housing—Federal Housing Commissioner, Office of Assistant Secretary for	24, II, VIII, X, XX
Human Development Services Office	45, XIII
Immigration and Naturalization Service	8, I
Indian Affairs, Bureau of	25, I

Agency	CFR Title, Subtitle or Chapter
Indian Arts and Crafts Board	25, II
Industrial Economics, Bureau of, Commerce Department	15, VI
Information Agency, United States	22, V; 48, 19
Information Resources Management, Office of, Agriculture Department	7, XXVII
Information Security Oversight Office	32, XX
Inspector General, Office of, Agriculture Department	7, XXVI
Inspector General, Office of, Housing and Urban Development Department	24, XII
Inter-American Foundation	22, X
Intergovernmental Relations, Advisory Commission on	5, VII
Interior Department	
Endangered Species Committee	50, IV
Federal Acquisition Regulation	48, 14
Federal Property Management Regulations System	41, 114
Fish and Wildlife Service, United States	50, I, IV
Geological Survey	30, IV
Indian Affairs, Bureau of	25, I
Indian Arts and Crafts Board	25, II
Land Management Bureau	43, II
Minerals Management Service	30, II
Mines, Bureau of	30, VI
National Park Service	36, I
Reclamation Bureau	43, I
Secretary of the Interior, Office of	43, Subtitle A
Surface Mining and Reclamation Appeals, Board of	30, III
Surface Mining Reclamation and Enforcement, Office of	30, VII
United States Fish and Wildlife Service	50, I, IV
Internal Revenue Service	26, I
International Boundary and Water Commission, United States and Mexico	22, XI
International Cooperation and Development Office	7, XXII
International Development, Agency for	22, II
International Development Cooperation Agency	22, XII
International Development, Agency for	22, II
International Joint Commission, United States and Canada	22, IV
International Organizations Employees Loyalty Board	5, V
International Regulatory Agencies (Fishing and Whaling)	50, III
International Trade Administration	15, III; 19, III
International Trade Commission, United States	19, II
Interstate Commerce Commission	49, X
Joint Board for the Enrollment of Actuaries	20, VIII
Justice Department	28, I; 41, 128
Drug Enforcement Administration	21, II
Federal Acquistion Regulation	48, 28
Federal Claims Collection Standards	4, II
Federal Prison Industries Inc.	28, III
Foreign Claims Settlement Commission of the United States	45, V
Immigration and Naturalization Service	8, I
Prisons, Bureau of	28, V
Labor Department	
Benefits Review Board	20, VII
Employees' Compensation Appeals Board	20, IV
Employment and Training Administration	20, V
Employment Standards Administration	20, VI
Federal Acquisition Regulation	48, 29
Federal Contract Compliance Programs, Office of	41, 60
Federal Procurement Regulations System	41, 50
Labor-Management Relations and Cooperative Programs, Bureau of	29, II
Labor-Management Standards, Office of	29, IV
Mine Safety and Health Administration	30, I
Occupational Safety and Health Administration	29, XVII
Pension and Welfare Benefit Programs	29, XXV
Public Contracts	41, 50

Agency	CFR Title, Subtitle or Chapter
Secretary of Labor, Office of	29, Subtitle A
Wage and Hour Division	29, V
Workers' Compensation Programs, Office of	20, I
Labor-Management Relations and Cooperative Programs, Bureau of	29, II
Labor-Management Standards Enforcement, Office of	29, IV
Land Management, Bureau of	43, II
Legal Services Corporation	45, XVI
Library of Congress	36, VII
Copyright Office	37, II
Low-Income Housing, Department of Housing and Urban Development	24, VIII
Management and Budget, Office of	5, III
Marine Mammal Commission	50, V
Maritime Administration	46, II
Merit Systems Protection Board	5, II
Micronesian Status Negotiations, Office for	32, XXVII
Mine Safety and Health Administration	30, I
Minerals Management Service	30, II
Mines, Bureau of	30, VI
Minority Business Development Agency	15, XIV
Miscellaneous Agencies	1, IV
Monetary Offices	31, I
Mortgage Insurance and Loan Programs Under the Emergency Homeowners' Relief Act, Department of Housing and Urban Development	24, XV
National Aeronautics and Space Administration	14, V; 48, 18
National Archives and Records Administration	36, XII
National Bureau of Standards	15, II
National Capital Planning Commission	1, IV
National Commission on Libraries and Information Science	45, XVII
National Credit Union Administration	12, VII
National Foundation on the Arts and the Humanities	45, XI
National Highway Traffic Safety Administration	23, II, III; 49, V
National Labor Relations Board	29, I
National Marine Fisheries Service	50, II, IV
National Mediation Board	29, X
National Oceanic and Atmospheric Administration	15, IX; 50, II, III, IV, VI
National Park Service	36, I
National Railroad Adjustment Board	29, III
National Railroad Passenger Corporation (AMTRAK)	49, VII
National Science Foundation	45, VI; 48,25
National Security Council	32, XXI
National Security Council and Office of Science and Technology Policy	47, II
National Telecommunications and Information Administration	15, XXIII
National Transportation Safety Board	49, VIII
Navajo and Hopi Indian Relocation Commission	25, IV
Navy Department	32, VI
Neighborhood Reinvestment Corporation	24, XXV
Nuclear Regulatory Commission	10, I
Occupational Safety and Health Administration	29, XVII
Occupational Safety and Health Review Commission	29, XX
Overseas Private Investment Corporation	22, VII
Packers and Stockyards Administration	9, II
Panama Canal Regulations	35, I
Patent and Trademark Office	37, I
Peace Corps	22, III
Pennsylvania Avenue Development Corporation	36, IX
Pension Benefit Guaranty Corporation	29, XXVI
Pension and Welfare Benefit Programs, Department of Labor	29, XXV
Personnel Management, Office of	5, I; 45, VIII
Postal Rate Commission	39, III

Agency	CFR Title, Subtitle or Chapter
Postal Service, United States	39, I
Postsecondary Education, Office of	34, VI
President's Commission on White House Fellowships	1, IV
Presidential Documents	3
Prisons, Bureau of	28, V
Productivity, Technology and Innovation, Assistant Secretary (Commerce)	37, IV
Property Management Regulations System, Federal	41, Subtitle C
Public Contracts, Department of Labor	41, 50
Public Health Service	42, I
Railroad Retirement Board	20, II
Railway Association, United States	49, IX
Reclamation Bureau	43, I
Refugee Resettlement, Office of	45, IV
Regional Action Planning Commissions	13, V
Research and Special Programs Administration	49, I
Rural Electrification Administration	7, XVII
Rural Telephone Bank	7, XVI
Saint Elizabeths Hospital	42, III
Saint Lawrence Seaway Development Corporation	33, IV
Science and Technology Policy, Office of	32, XXIV
Science and Technology Policy, Office of, and National Security Council	47, II
Secret Service	31, IV
Securities and Exchange Commission	17, II
Selective Service System	32, XVI
Small Business Administration	13, I; 48, 22
Smithsonian Institution	36, V
Social Security Administration	20, III; 45, IV
Soil Conservation Service	7, VI
Solar Energy and Energy Conservation Bank, Department of HUD	24, X
Soldiers' and Airmen's Home, United States	5, XI
Special Education and Rehabilitative Services, Office of	34, III
Special Representative for Trade Negotiations, Office of	15, XX
State Department	22, I
Surface Mining and Reclamation Appeals, Board of	30,III
Susquehanna River Basin Commission	18, VIII
Tennessee Valley Authority	18, XIII
Trade Representative, United States, Office of	15, XX
Transportation, Department of	44, IV
Coast Guard	33, I; 46, I, III; 49, IV
Federal Acquisition Regulation	48, 12
Federal Aviation Administration	14, I
Federal Highway Administration	23, I, II; 49, III
Federal Railroad Administration	49, II
Maritime Administration	46, II
National Highway Traffic Safety Administration	23, II, III; 49, V
Research and Special Programs Administration	49, I
Saint Lawrence Seaway Development Corporation	33, IV
Secretary of Transportation, Office of	14, II; 49, Subtitle A
Urban Mass Transportation Administration	49, VI
Travel Service, United States	15, XII
Treasury Department	
Alcohol, Tobacco and Firearms, Bureau of	27, I
Comptroller of the Currency	12, I
Customs Service, United States	19, I
Engraving and Printing, Bureau of	31, VI
Federal Acquisition Regulation	48, 10
Federal Law Enforcement Training Center	31, VII
Fiscal Service	31, II
Foreign Assets Control, Office of	31, V
Internal Revenue Service	26, I
Monetary Offices	31, I
Secret Service	31, IV
Secretary of the Treasury, Office of	31, Subtitle A

Agency	CFR Title, Subtitle or Chapter
United States Customs Service	19, I
Truman, Harry S. Scholarship Foundation	45, XVIII
United States and Canada, International Joint Commission	22, IV
United States Arms Control and Disarmament Agency	22, VI
United States Customs Service	19, I
United States Fish and Wildlife Service	50, I, IV
United States Information Agency	22, V; 48, 19
United States International Development Cooperation Agency	22, XII
United States International Trade Commission	19, II
United States Postal Service	39, I
United States Railway Association	49, IX
United States Soldiers' and Airmen's Home	5, XI
United States Trade Representative, Office of	15, XX
United States Travel Service	15, XII
Urban Mass Transportation Administration	49, VI
Veterans Administration	38, I; 48, 8
Vice President of the United States, Office of	32, XXVIII
Vocational and Adult Education, Office of	34, IV
Wage and Hour Division	29, V
Water Resources Council	18, VI
Welfare-Pension Reports, Office of Labor-Management and	29, IV
Workers' Compensation Programs, Office of	20, I

List of CFR Sections Affected

All changes in this volume of the Code of Federal Regulations which were made by documents published in the FEDERAL REGISTER since January 1, 1973, are enumerated in the following list. Entries indicate the nature of the changes effected. Page numbers refer to Federal Register pages. The user should consult the entries for chapters and parts as well as sections for revisions.

For the period before January 1, 1973, see the "List of CFR Sections Affected, 1949-1963 and 1964-1972," published in three separate volumes.

1973

14 CFR

	38 FR Page
Chapter I	
141.6 Added	17493
141.75 (a), (b), and (c) amended	12203
154 Added	12204
159.3 Revised	35452
167 Removed	19673
171.7 (a) revised; (e) added	28557
171.47 (a)(4) added	28557
171.109 (a)(4) revised	28557
171.111 (a)(1) revised	28558
183.21 (d) amended	12203
185.3 Nomenclature changes	26444
185.5 Nomenclature changes	26444
189.5 Amended	9008

1974

14 CFR

	39 FR Page
Chapter I	
141 Revised	20152
141.11 (c)(7) corrected	25473
114 Appendix A 5 (c) amended	25473
152.23 Heading and (a) introductory text revised; (a)(1) through (7) redesignated as (a)(2) through (8); new (a)(1) added: redesignated (a)(5)(i) amended	19349
152.25 (a) amended	19349
152.29 (a) amended	19349
152.47 (a)(8) amended; (b)(5) removed; (b)(6) redesignated as (b)(5); (c)(6) added	19349

14 CFR—Continued

	39 FR Page
Chapter I—Continued	
152.51 Heading revised; (b) removed; (a) redesignated as (b); new (a) added	19349
152.53 (a), (c) and (e) amended	19349
152.63 Revised	19350
152.64 Added	19350
152.65 (a) introductory text revised	19350
152.66 Added	19350
152.69 Revised	19351
(c) corrected	20590
152.71 Revised	19351
152.73 (a) amended	19351
152.75 Revised	19351
152.123 Revised	19352
152.125 (b)(1) revised	19352
152.129 (c)(18) amended	19352
152.131 (b)(14) amended	19352
152.136 Added	19352
152.137 (e) amended	19352
152.140 Added	19352
152.141 Revised	19352
152.142 Added	19353
152.143 Heading, (b) and (c) revised; (e) and (f) added	19353
152.145 Added	19353
152 Appendices J, K, L, and M added	19353
159.3 (a)(2)(iii) corrected	794
199.3 Amended	30481
199.9 Amended	30481
199.11 Hearing and text amended	30481

1975

14 CFR

40 FR Page

Chapter I

135 Special FAA Reg. 30 added...57445
135.2 (a) amended; (e) revised.....21705
139.1 (b) (4) and (5) added........... 11714
171.13 (b) amended.......................36110
171.33 (b) amended.......................36110
171.53 (b) amended.......................36110
171.117 (b) amended.....................36110
171.163 (b) amended.....................36110
171.213 (b) amended.....................36110
171.251—171.275 (Subpart I) Added.. 36110
171.265 (b) and (g) corrected.......41093
(j) corrected.................................. 43719

1976

14 CFR

41 FR Page

Chapter I

145.43 (b)(3) amended.................. 47230
145.45 (f) amended........................47230
145.73 Amended............................ 47230
147.3 Revised................................ 47230
147.7 (c) removed......................... 47230
147.38a Nomenclature change.... 47230
152.23 (a)(6) revised; (b) amended...46435
152.45 (b) amended.......................46435
152.73 (b) and (e) amended..........46435
152.103 (h)(2) revised................... 37102
159.2 Added...................................19623
159.3 Removed...............................19624
159.4 Added...................................19624
183 SFAR 31 added.........................2247
191 Added......................................53777
191.7 Heading corrected..............55334

1977

14 CFR

42 FR Page

Chapter I

152 Special FAA Reg. 35 added...59476
152.23 (a)(6) revised......................32630
152.55 (a) amended....................... 64114
152.83 (b) and (c) revised............. 42849
152 Appendix H amended............64114
154.7 (b)(14) revised......................32630
183 Special Regulations No. 31 removed.......................................44983

1978

14 CFR

43 FR Page

Chapter I

145 Special FAA Reg. 36 added.....3085
145.17 (b) revised..........................22643
145.59 (a) amended........................ 22643
147.31 (c)(1) revised; (c)(2) redesignated as (c)(3); new (c)(2) added...............................22643
159.93 Removed..............................2720

1979

14 CFR

44 FR Page

Chapter I

152.47 (a)(8), (c)(4), (5), and (6) amended.....................................54468
152 Appendix J amended.............54468
191.3 (b)(10) added........................72345
199 Revised.................................. 44809

1980

14 CFR

45 FR Page

Chapter I

145 Special FAA Reg. 36 amended; effective date extended to 1-23-82..5677
145.2 Heading revised; text designated as (a); (b) added.......... 67235
152 Authority citation revised.... 58035
Incorporation by reference approvals...86672
152.1—152.11 (Subpart A) Revised..34784
152.1 Introductory text revised; (e) added.................................. 10188
152.7 (a)(1)(i) and undesignated text following (iii) revised....... 10188
152.101—152.119 (Subpart B) Revised..34786
152.111 (c)(7) revised.................... 56622
(c)(7) corrected.............................58107
152.117 (b)(4) revised....................56622
152.203—152.213 (Subpart C) Revised..34789
152.301—152.325 (Subpart D) Revised..34791
152.401—152.425 (Subpart E) Added...... 10188
152.407 Compliance pending OMB approval...........................10192

14 CFR—Continued

45 FR Page

Chapter I—Continued

152.411 (c)(1) and (2) compliance pending OMB approval....10192
152.415 Compliance pending OMB approval....10192
152.417 (b) compliance pending OMB approval....10192
152.501—152.509 (Subpart F) Added....34792
152.601—152.609 (Subpart G) Added....58035
152 Appendixes A through D revised....34793
  Appendix D amended....56622
154.7 (b)(14) revised....56622
155.11 (c)(12) added....56622
159 Technical correction....40572
159.35 Revised....21215
  Republished....22018
159.40 Added; eff. 1-5-81....62408
  Effective date deferred to 4-26-81....71251
159.59 (a) through (c) redesignated as (c) through (e); new (a) and (b) added; eff. 1-5-81....62408
  Effective date deferred to 4-26-81....71251
159.60 Added; eff. 1-5-81....62408
  Effective date deferred to 4-26-81....71251
159.91 Revised....35320
  Effective date postponed....49917
159.93 Added....35320
  (a)(3) corrected....45578
  Effective date postponed....49917
  (a)(3) and (c) revised....70238
159.94 Added....35321
  Effective date postponed....49917
  (e) revised....70239
183.11 (c) revised....32669
183.29 (a) through (h) amended; (i) added....32669
183.31 Revised....1416

1981

14 CFR

46 FR Page

Chapter I

145 Special FAA Reg. 36 effectiveness deferred to 1-23-84....58652
145.2 Effective date deferred to 4-1-81....10706, 10902
  Effective date amended to 2-3-81....10903

14 CFR—Continued

46 FR Page

Chapter I—Continued

150 Added; interim....8338
  Table of contents corrected....33465
  Incorporation by reference approvals....63478
  Appendix A corrected....33465
152 Special FAA Reg. 35 removed....30809
  Incorporation by reference approvals....63478
152.111 (c)(4) amended....30809
152.113 (b)(1) amended....30809
152 Appendix E added....30809
159 Incorporation by reference approvals....63478
159.40 (a) through (c) amended....3500
  Effective date deferred to 10-25-81....19225
  Effective date deferred to 11-30-81....52100
  Removed; eff. 11-23-81....58048
  Added; eff. 3-1-82....58049
159.59 (b) amended; (e) revised....3500
  Effective date deferred to 10-25-81....19225
  Effective date deferred to 11-30-81....52100
  (a) through (c) redesignation and new (a) and (b) addition removed; eff. 11-23-81....58048
  (a), (b), and (c) redesignated as (b), (c), and (d); new (a) added; eff. 12-6-81....58049
159.60 Amended....3500
  Effective date deferred to 10-25-81....19225
  Added; emergency rule; eff. 5-26-81....28636
  Effective date deferred to 11-30-81....52100
  Removed; eff. 11-23-81....58048
  Added; eff. 12-6-81....58049
171 Incorporation by reference....63478
171.301—171.327 (Subpart J) Added....61566
183 Comment response....55682
191 Comment response....55682

1982

14 CFR

Chapter I

	47 FR Page
141 Appendixes A and D amended	46066
145 Technical correction	34980
145.13 Amended	35694
145.41 Revised	33390
145.47 (b) amended	33391
145 Appendix A amended	33391
159.40 Amendment revocation; effective date clarified	2079
159.59 Amendment revocation ((a) through (c) redesignated and new (a) added); effective date clarified	2079
159.60 Amendment revocation; effective date clarified	2079
171.309 (b)(5) amended	46260
171.311 Corrected	46260, 47808
171.313 Corrected	46267
171.317 Corrected	46269
187.15 Revised	35694
187 Appendix A added	35694

1983

14 CFR

Chapter I

	48 FR Page
152 Appendix E removed	29274
159.35 (b) introductory text and (3) revised; (b) (4) added	51419

14 CFR—Continued

Chapter I—Continued

	48 FR Page
183.11 (e) added	16179
183.13 (c) added	16179
183.15 (a) and (b) amended; (c) redesignated as (d); new (c) added	16179
183.33 Added	16179

1984

14 CFR

Chapter I

	49 FR Page
145 Special FAA Reg. 36 amended	4354
150 Revised (eff. 1-18-85)	49260
171.311 Table 8 amended	15545
199.19 Nomenclature change	14930
199.25 Nomenclature change	14930
199.27 Nomenclature change	14930
199.29 Nomenclature change	14930

1985

14 CFR

Chapter I

	50 FR Page
150.21 (b) corrected	5063
150.23 (b) corrected	5064
150 Appendix A corrected	5064
171 Authority citation revised	48745
171.157 (a) amended	48745
198 Revised; eff. 1-15-86	51336

○